CAT 1B

FLUOR DANIEL ARCS TEAM

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August 4, 1994

FDI/ARCS # 2848

U.S. Environmental Protection Agency
Attn: Stacey Bennett, P.E. (6E-SH)
Work Assignment Manager
1445 Ross Avenue, Suite 1000
Dallas, Texas 75202

CONTRACT NO. 68-W9-0013
NARRATIVE REPORT / PRESCORE
THOMASON LUMBER COMPANY
EPA ID NO. OKD007335024
BROKEN BOW, McCURTAIN COUNTY, OKLAHOMA
SITE INSPECTION PRIORITIZATION
WORK ASSIGNMENT NO. 33-6JZZ

Dear Ms. Bennett:

Attached is the Narrative Report and supporting documentation for the above-referenced site. We have also attached a 3.5" disk with an electronic copy of the Narrative Report and PREscore. With your approval, this submittal constitutes completion of our work for this site.

Should you have questions or require additional information, please contact either of the undersigned at (214) 450-4100.

Sincerely,

Mengistu Lemma
Mengistu Lemma
ARCS Technical Manager

Robert K. Franke
ARCS Deputy Program Manager

ML:RF:kp

Attachments

9793372

pc: Lon Biasco (6H-MA) EPA Region 6 (w/o attch.)

Introduction

Fluor Daniel, Inc. (FDI) was tasked by the Environmental Protection Agency (EPA) Region 6 to conduct Site Inspection Prioritization (SIP) activities at the Thomason Lumber Company, Broken Bow, McCurtain County, Oklahoma, EPA ID No. OKD007335024. A phased approach was implemented for each site under this Work Assignment (WA). A preliminary site score was developed utilizing the PA-Score computer program. The PA-Score was completed using historical data provided by EPA Region 6. Additional non-sampling data were then collected and a PREscore package was completed.

Site Description/Background Information

Thomason Lumber Company is located south of Highway 70 in Broken Bow, Oklahoma (Figure 1). Site coordinates are north latitude 34° 01′ 24.0", west longitude 94° 43′ 42.0". The site is an active pentachlorophenol (PCP) and creosote wood preserving plant. Separator tank and surface impoundments used to recover and/or separate PCP and creosote from the water are located on terrain with a slope of up to 20% [2,016].

The previous owner of the site is Art Thomason [2,1]. The files are not specific in length of the operations, however, during 1985 the site was sold to Earl Hayes, who took the responsibility to clean up the site [11].

Thomason Lumber was identified as a potential hazardous waste site on September 15, 1980 [12,1]. An immediate site inspection was conducted on September 17, 1980 [12,1]. A soil sample was taken from the area where there was evidence of overflow from the separator [6,7]. After the site inspection, it was concluded that further investigative action was needed to define the problem [13]. On December 15, 1980, another site inspection was conducted and one water and three soil samples were collected [2,017]. Analysis of a water sample taken from one of the waste sources indicated PCP and total phenols at concentrations of 50 ppb and 1715 ppb, respectively. No background water sample was collected. The analytical data for the soil/sediment samples are missing from the files [9].

On April 9, 1981, an administrative order was issued for failure to renew a NPDES permit and discharging into an intermittent creek [14,001-003]. In March 1985, the Oklahoma Water Resource Board (OWRB) went to the new owner of Thomason Lumber Company, Mr. Earl Hayes, and had Mr. Hayes sign the consent agreement [11]. If OSDH/RCRA and OWRB efforts fail to result in effective remedial actions, OSDH should renew investigation under the PA/SI program [16].

Waste Characteristics

There are four surface impoundments and five storage tanks located on-site (Figure 2) [2,011-015]. The first surface impoundment is Pond A (Figure 2). It does not have a liner and erosion and instability of embankments have been observed [2,011]. Pond A is used to recover and separate PCP and creosote from water [2,016]. The calculated volume of waste is approximately 64,000 cubic feet [2,011].

erosion has been observed on the steep side of the pond area. The volume of waste is approximately 9,375 cubic feet [2,012].

The third source is Pond C, the final pond used for separating PCP and creosote from water (Figure 2). Pond C does not have a liner or embankments. Also, erosion was observed on the steep side of Pond C. The volume of waste is approximately 7,500 cubic feet [2,013]. A water sample was collected from Pond C on September 15, 1980 [2,017]. Analytical data revealed PCP and total phenols in concentrations of 50 ppb and 1715 ppb, respectively [9]. No background water sample was taken [2,017].

The fourth source is Pond D (Figure 2). Pond D is used for storing stormwater. There is no liner or embankments. Erosion has been observed around the pond on the steep slope side. The volume of waste is approximately 12,500 cubic feet [2,014].

The fifth source consists of five storage tanks (Figure 2). There is evidence that overflow from the separator tank occurred [2,015]. The pipeline from the separator tank to Pond A is broken [14,002]. The total volume capacity of the five storage tanks is 40,000 cubic feet [2,015].

Ground Water Migration Pathway

The ground water pathway was not evaluated because ground water in the area is not used for drinking water [15].

Surface Water Migration Pathway

The overland migration from the source to the Probable Point of Entry (PPE) on Yanubee Creek is approximately 1.8 miles. Yanubee Creek flows approximately 7 miles south to Little River. The remaining 6.2 miles of the target distance limit is the Little River [8].

Broken Bow receives its drinking water from a surface water intake located on Mountain Fork River. The surface water intake is not located within the target distance limit. It is located 8 miles northeast of the site [7,001].

There are no known sensitive environments within the target distance limit [10,002]. However, it is assumed that wetlands are present along the surface water pathway [8].

Soil Exposure Pathway

The closest residence is approximately 1/4 mile away [3,002]. There is approximately 10 workers on-site [6,8]. The population in a 0 to 1/4 mile radius of the site is 327 people. The population in a 1/4 to 1/2 mile radius of the site is 901 people. The population in a 1/2 to 1 mile radius of the site is 1,987 people [3,002].

Observation of the soil around the surface impoundments and processing plant is highly contaminated [14,003]. The site is not fenced, therefore, the site is accessible to the public [2,7].

No terrestrial or sensitive environment is expected at this site [10,002].

Air Migration Pathway

There are no known sensitive environments within the target distance limit [10,002].

The population in a 0 to 1/4 mile radius of the site is 327 people. The population in a 1/4 to 1/2 mile radius of the site is 901 people. The population in a 1/2 to 1 mile radius of the site is 1,987 people. The population in a 1 to 2 mile radius of the site is 1,380 people. The population in a 2 to 3 mile radius of the site is 1,002 people. The population in a 3 to 4 mile radius of the site is zero people [3,002].

Scoring Strategy

Thomason Lumber Company is a former wood preserving plant. There are four surface impoundments and five storage tanks located on the site. Contaminants of concern are PCP and creosote. The ground water and surface water pathways are not a significant concern because drinking water is not obtained from these pathways. The soil exposure pathway and the air migration pathway are of limited concern. Factors to be considered for these pathways include: the site is accessible to the public; there are workers present on site; there is an observed release to the soil; and there is a large quantity of waste present on site.

REFERENCES

[1] U.S. Environmental Protection Agency. Final Rule Hazard Ranking System FR. 51532-51667, December 14, 1990.

[2] Jairo Guevara, Environmental Specialist, Ecology & Environmental, Inc., "Site Inspection Report", December 23, 1980, pp. 1-20.

[3] U.S. Environmental Protection Agency, Geographical Exposure Modeling System (GEMS) database, compiled from U.S. Census Bureau 1990 data, accessed May 11, 1994.

[4] U.S. Department of Commerce, Weather Bureau, "Rainfall Frequency Atlas of the United Sates".

[5] U.S. Geological Survey, Oklahoma Water Resource Board, "Statistical Summaries of Streamflow Records in Oklahoma, and Parts of Arkansas, Kansas, Missouri, and Texas", Water Resources Investigation No. 87-4205.

[6] Thomas Burger, Environmental Resource Research Assistant, Ok Department of Health, "Site Inspection Report", September 26, 1980.

[7] FAX: Subject: Public Water Supply for Broken Bow. From: Tim Ward, Oklahoma Department of Environmental Quality, To: Ariadne Lytwyn, Geologist, Fluor Daniel, Inc., June 15, 1994.

[8] U.S. Geological Survey, 7.5-Minute Topographic Maps of Oklahoma: Broken Bow, 1981; Shults, 1950, photorevised 1970.

[9] LETTER. Subject: Laboratory Report - Thomason Lumber Company. From: William Langley, Chief Laboratory Services Section, EPA, To: William Librizzi, Surveillance & Analysis Division, February 9, 1981.

[10] LETTER. Subject: Sensitive Environment in a 4-mile Radius. From: Ian Butler, Data Coordinator, Oklahoma Natural Heritage Inventory, To: Ariadne Lytwyn, Geologist, Fluor Daniel, Inc., June 1, 1994.

[11] MEMORANDUM. Subject: Thomason Lumber Company. From: James Adams, Oklahoma Water Resource Board, To: Project Files, March 7, 1985.

[12] Thomas Burger, Oklahoma State Department of Health, "Identification and Preliminary Assessment", September 15, 1980.

[13] Kenneth Burns, Oklahoma State Department of Health, "Tentative Disposition", October 6, 1980.

[14] LETTER. Subject: Administrative Order Docket No. VI-81-062. From: Diana Dutton, Director of Enforcement Division, EPA, To: Art Thomason, President, Thomason Lumber Company, April 9, 1981.

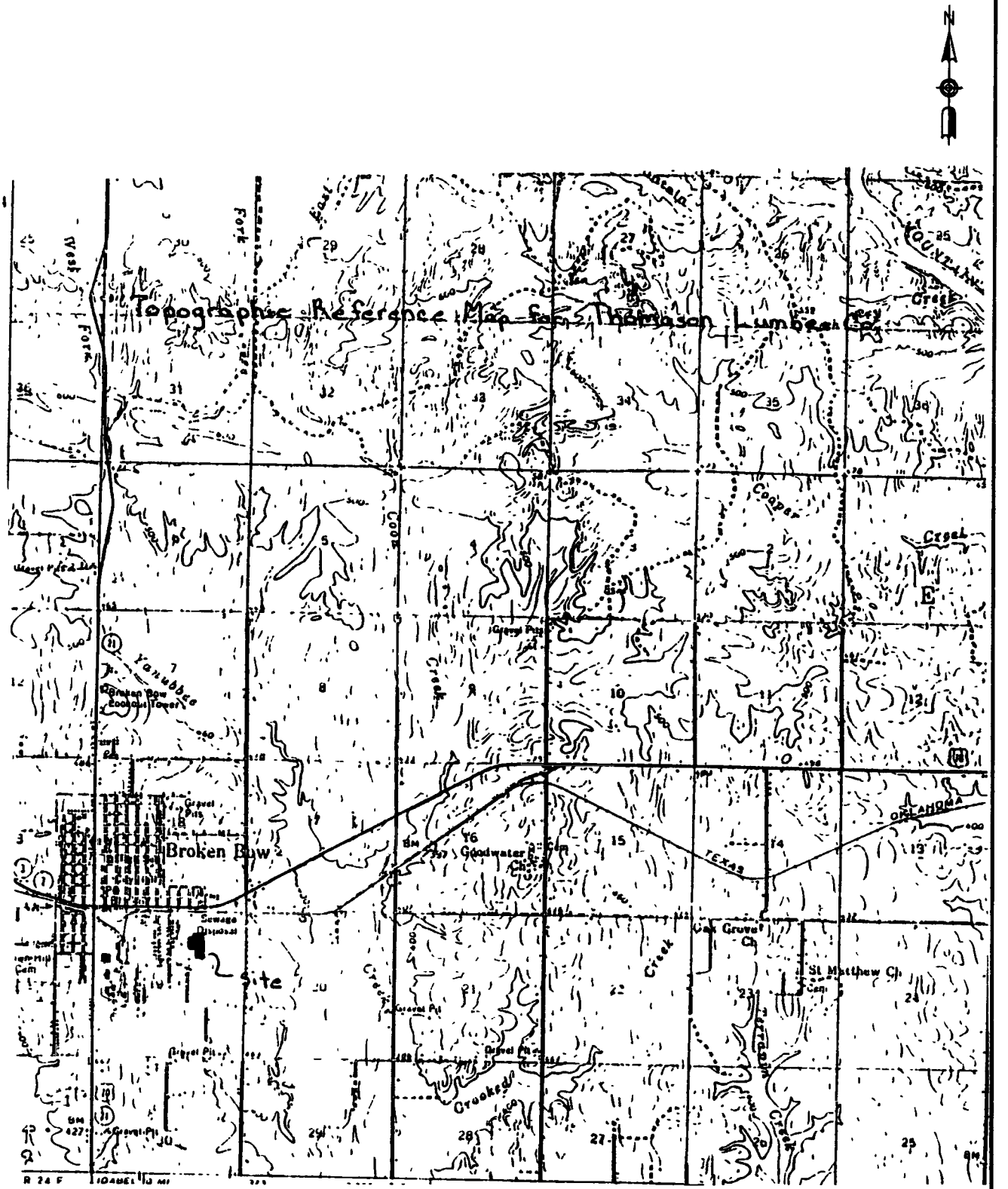
[15] Larry D. Wright, "Tentative Disposition", January 28, 1981.

[16] Amy Layne, EPA, "Tentative Disposition", November 29, 1985.

[17] RECORD OF COMMUNICATION: Subject: Fish Production. From: Ariadne Lytwyn, Geologist, Fluor Daniel, Inc., To: Jack Harper, Ok Dept. Wildlife, March 25, 1994.

[18] U.S. Environmental Protection Agency, "Hazard Ranking System Guidance Manual", OSWER Directive 9345.1-07, November 1992, p. 314.

FIGURE 1



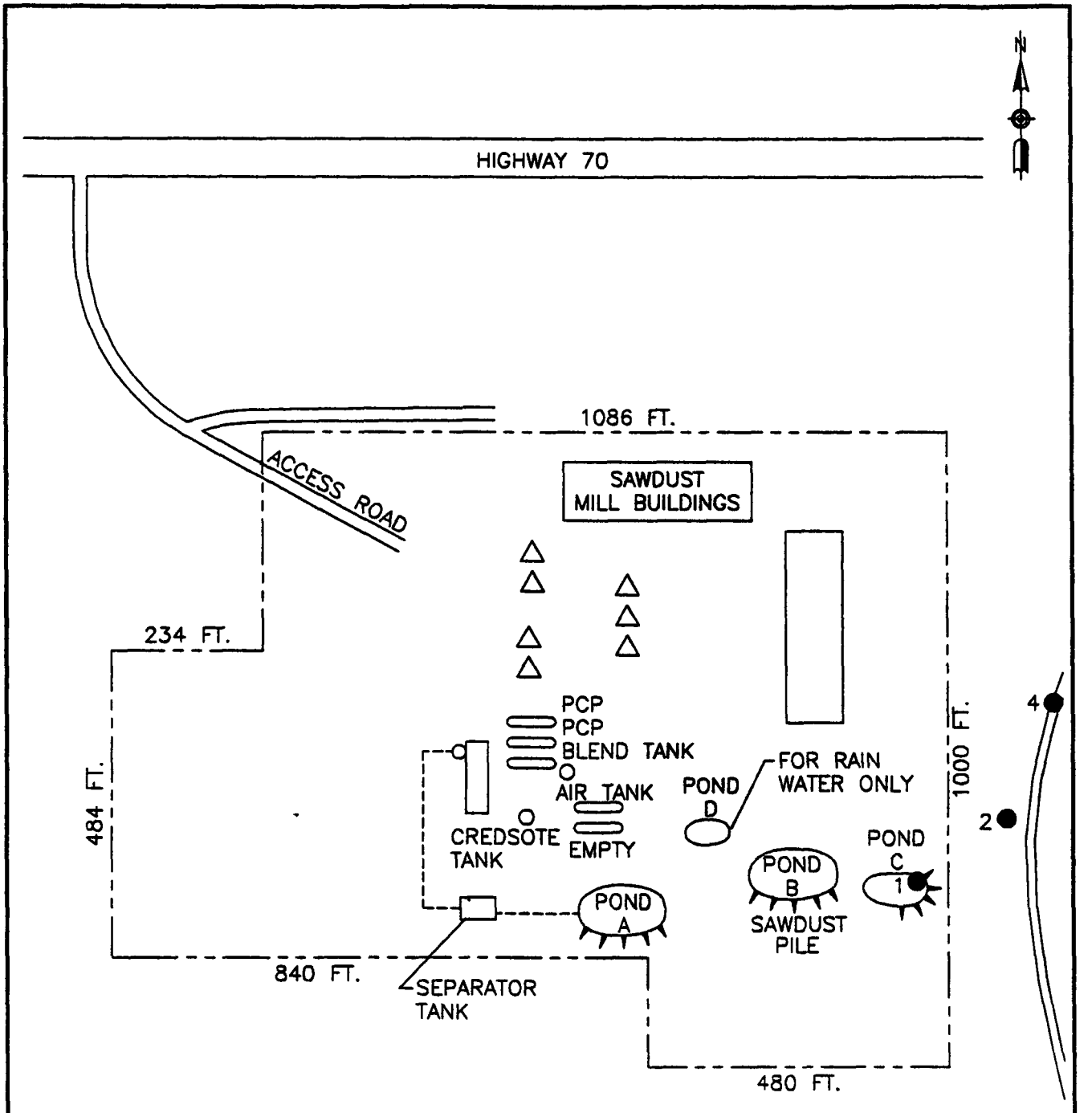
FLUOR DANIEL

FIGURE 1

SITE LOCATION MAP
THOMASON LUMBER CO.
BROKEN BOW, OKLAHOMA

DIRECTORY: P:\ENVIRO\06642400\ENV | FILE No. 2436-1 | REV. 0

FIGURE 2



LEGEND

- ROAD
- PROPERTY LINE
- STEEP SLOPE
- △ PILES OF WOOD (TREATED/UNTREATED)
- ● SAMPLING POINT

FLUOR DANIEL

FIGURE 2

SITE AREA MAP
THOMASON LUMBER CO.
BROKEN BOW, OKLAHOMA

DIRECTORY: P:\ENVIRO\06642400\ENV | FILE No. 2436-2 | REV. 0

This Document Contained Material Which Was Not Filmed/Scanned

Title Thomason Lumber Company, Correspondence, Alternative Media

Please Refer to the File in Superfund Records Center

REFERENCE 1

U.S. Environmental Protection Agency. Final Rule Hazard Ranking System FR. 51532-51667, December 14, 1990.

federal register

Friday
December 14, 1990

Part II

Environmental Protection Agency

40 CFR Part 300
Hazard Ranking System; Final Rule

01-001

REFERENCE 2

Jairo Guevara, Environmental Specialist, Ecology & Environmental, Inc., "Site Inspection Report", December 23, 1980, pp. 1-20.

EPA

PC... AL HAZARDOUS WASTE SITE ...E INSPECTION REPORT

REGION: 6

SITE NUMBER (to be assigned by Hq): OK03701

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

OKD 007 336024

A. SITE NAME: THOMASON LUMBER CO. X SA VOL 1	B. STREET (or other identifier): On Huffman Rd.-half mile South of Hwy. 70.		
C. CITY: Broken Bow	D. STATE: OK	E. ZIP CODE: 74728	F. COUNTY NAME: McCurtain

G. SITE OPERATOR INFORMATION

1. NAME: Thomason Lumber Co.-Art Thomason-President		2. TELEPHONE NUMBER: (405) 584-2452	
3. STREET: P.O. Box 804	4. CITY: Broken Bow	5. STATE: OK	6. ZIP CODE: 74728

H. REALTY OWNER INFORMATION (if different from operator of site)

1. NAME: Same	2. TELEPHONE NUMBER:	
3. CITY:	4. STATE:	5. ZIP CODE:

I. SITE DESCRIPTION: See attachment A

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.):

B. APPARENT SERIOUSNESS OF PROBLEM: ☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Jairo Guevara (signature: J Guevara)	(214) 742-4521	12/23/80

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME: Jairo Guevara	2. TITLE: Chemical Engineer- FIT
3. ORGANIZATION: Ecology and Environment Inc., 1509 Main St., Dallas, TX 75201	4. TELEPHONE NO. (area code & no.): (214) 742-4521

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Debbie Vaughn	Ecology and Environment, Inc.	(214) 742-4521
Gene McDonald	" " "	"
Barry Nash	" " "	"

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Art Thomason	President (405) 584-2452	P.O. Box 804, Broken Bow, OK 74728
Richard Thomason	Vice-President (405) 584-2452	" " "
Jerry Montgomery	Treatment Operator (405) 584-2452	" " "

REVIEWED BY (6ASASC): J. Uccardi 1/23/81

II. INSPECTION INFORMATION (contin

D. GENERATOR INFORMATION (source of)

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
Thomason Lumber Co.	(405)584-2452	P.O. Box 804, Broken Bow, OK 74728	Creosote and Pentachlorophenol
			Oily sludges

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED
N/A			

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
N/A		

G. DATE OF INSPECTION (mo., day, & yr.)	H. TIME OF INSPECTION	I. ACCESS GAINED BY: (credentials must be shown in all cases)
12/15/80	3:15 pm	[X] 1. PERMISSION [ ] 2. WARRANT

J. WEATHER (describe)
Clear; 70°F; Calm

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER			
c. WASTE	X (1)	Houston EPA Lab 6608 Hornwood Drive Houston, TX 77074	
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL	X (1)	" " "	
h. VEGETATION			
i. OTHER (specify) Sediment	X (2)	" " "	

B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
Radioactivity	Around Plant	Background

02-002

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS: [X] a. GROUND [ ] b. AERIAL

2. PHOTOS IN CUSTODY OF: EPA Region VI, Dallas, TX (See attachments)

D. SITE MAPPED?

[X] YES. SPECIFY LOCATION OF MAPS: Site and area maps and included as attachments 1,2 and 3.

E. COORDINATES

1. LATITUDE (deg.-min.-sec.): 34° 01' 24" N

2. LONGITUDE (deg.-min.-sec.): 94° 43' 42" W

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

[ ] 2. INACTIVE (Those sites which no longer receive wastes.)

[ ] 3. OTHER (specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES (specify generator's four-digit SIC Code): 2491 and 2421

C. AREA OF SITE (in acres): 23

D. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [X] 2. YES (specify): Storage and equipment bldgs.

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL	X	1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
X	4. TRUCK	X	4. TANK, ABOVE GROUND	X	4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

[X] 1. STORAGE [ ] 2. INCINERATION [ ] 3. LANDFILL [X] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL

[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [X] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[X] 1. LIQUID [ ] 2. SOLID [X] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[ ] 1. CORROSIVE [X] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE

[X] 5. TOXIC [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE

[ ] 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below. No. Only purchase records of pentachlorophenol, creosote and oil used in the wood preserving process. In a typical year 60,000 lbs. of PCP and 10,000 gallons of creosote are used in the plant.

02-003

VII WASTE RELATED INFORMATION (contin.

2. Estimate the amount (specify unit of m re) of waste by category; mark 'X' to indic which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT: Unknown	AMOUNT: Unknown	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
(1) PAINT, PIGMENTS	X (1) OILY WASTES	(1) HALOGENATED SOLVENTS	(1) ACIDS	(1) FLYASH	(1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER(specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER(specify):	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
X (5) OTHER(specify): Pentachlorophenol and creosote sludges			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER(specify):
			(6) CYANIDE	(6) OTHER(specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER(specify):		

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X') a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY (mark 'X') a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
PCP	X	X		X				87-86-5	Unknown	
Creosote	X	X			X			8001-58-9	Unknown	

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

X A. HUMAN HEALTH HAZARDS The major health hazards are skin exposure (dermatitis: PCP; skin carcinogen: creosote) and inhalation of vapors. Both creosote and PCP are recognized carcinogen agents. Plant employees do not wear sufficient protective equipment (gloves; mask, etc.) during wood preservation operations.

02-004

VIII. HAZARD DESCRIPTION (continued)

☐ B. NON-WORKER INJURY/EXPOSURE

☒ C. WORKER INJURY/EXPOSURE See VIII-A above

☐ D. CONTAMINATION OF WATER SUPPLY

☐ E. CONTAMINATION OF FOOD CHAIN

☒ F. CONTAMINATION OF GROUND WATER Possible due to vertical and lateral migration of PCP and creosote. Ponds used to recover and/or separate PCP and creosote are not lined.

☒ G. CONTAMINATION OF SURFACE WATER Possible contamination of nearby intermittent creek which discharges into the Yanubbee Creek. This creek discharges into the Little River which is 6 miles South of the site. Low solubility of PCP and creosote in water mitigates this contamination hazard. See photos 13,15 and 16.

02-005

III. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA

☐ I. FISH KILL

☐ J. CONTAMINATION OF AIR

☒ K. NOTICEABLE ODORS PCP, creosote and oily odors were detected during inspection.

☒ L. CONTAMINATION OF SOIL Soil around ponds and processing plant is highly contaminated. See photos 7,8,9 and 10.

☐ M. PROPERTY DAMAGE

02-006

Continued From Page 6

VIII. HAZARD DESCRIPTION (continued)

☐ N. FIRE OR EXPLOSION

☒ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID Spills from separator tank and ponds are evident. Possible run off off-site from final pond when discharge is permitted through overflow line. See photos 3,4,5,10 and 11.

☐ P. SEWER, STORM DRAIN PROBLEMS

☒ Q. EROSION PROBLEMS Erosion was observed on sloped terrain around ponds.

☒ R. INADEQUATE SECURITY Site is not fenced.

☐ S. INCOMPATIBLE WASTES

02-007

VIII. HAZARD DESCRIPTION (continued)

☐ T. MIDNIGHT DUMPING

☐ U. OTHER (specify):

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS	180	180	45	¼ mile
2. IN COMMERCIAL OR INDUSTRIAL AREAS	10	10	2	¼ mile
3. IN PUBLICLY TRAVELLED AREAS	300	300	0	¼ mile
4. PUBLIC USE AREAS (parks, schools, etc.)	0	0	0	¼ mile

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
50-100 ft.	Southeast	None
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)**	**F. DIRECTION TO DRINKING WATER SUPPLY**
0-50 gpm (Antlers Aquifer)	6 miles	East

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS*

☒ 2. COMMUNITY (specify town): Broken Bow > 15 CONNECTIONS

☒ 3. SURFACE WATER

☐ 4. WELL

Continue On Page 9

02-008

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
None				

I. RECEIVING WATER

1. NAME: Yanubbee Creek

☐ 2. SEWERS ☒ 3. STREAMS/RIVERS ☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER (specify):

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

Public and private water supplies, fish and wildlife, agriculture, municipal and industrial cooling water, primary and secondary recreation, aesthetics; small mouth bass spawning grounds.

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
X	1. SAND 10%	X	Paluxy Sand	X	Soil: sandy clay loam
X	2. CLAY 60%				
X	3. GRAVEL 30%				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)

☒ D. MODERATE (10 to .1 cm/sec.) ☐ E. LOW (.1 to .001 cm/sec.) ☐ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☒ 1. YES ☐ 2. NO 3. COMMENTS: Adjacent creek flows Northeast towards Yanubbee Creek.

H. DISCHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE: 10-20%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC. Slope off of the property to the North, East and South is 20% and to the West approx. 10%. The slopes have heavy vegetation with points of erosion between the ponds.

J. OTHER GEOLOGICAL DATA The site is a small knoll with the potentiality of surface flow to go in 3 directions. Area of major concern is on the Southeastern side where the sludge ponds are located. Any overflow or run-off from them flows East-Northeast. The adjacent creek on the Southeastern side of the site is intermittent and flows North-Northeast towards a first order tributary of Yanubbee Creek. Regional hydrologic flow is towards the Southeast.

Continue On Reverse

02-009

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN
Unpermitted							

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☒ NONE ☐ YES (summarize in this space)

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

02-010

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1 TYPE OF IMPOUNDMENT
Pond A (PCP and creosote separation)

2 STABILITY/CONDITION OF EMBANKMENTS
Some instability and erosion of embankments observed. See photo #5.

3 EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*
[X] YES [ ] NO Erosion observed in ponds area where slope is steep.

4 EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
[X] YES [ ] NO

5 ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
[X] YES [ ] NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
[ ] YES [X] NO

7 IMPOUNDMENT HAS LINER SYSTEM
[ ] YES [X] NO

7a. INTEGRITY OF LINER SYSTEM CHECKED
[ ] YES [ ] NO N/A

7b. FINDINGS
N/A

8. SOIL STRUCTURE AND SUBSTRUCTURE
Moderate Permeability

9 MONITORING WELLS
[ ] YES [X] NO

10. LENGTH, WIDTH, AND DEPTH
LENGTH 80 ft. WIDTH 80 ft. DEPTH 10 ft.

11. CALCULATED VOLUMETRIC CAPACITY
64,000 cubic feet

12. PERCENT OF CAPACITY REMAINING
15%

13. ESTIMATE FREEBOARD
1.5 ft.

14 SOLIDS DEPOSITION
[X] YES [ ] NO

15 DREDGING DISPOSAL METHOD
No dredging has been performed

16 OTHER EQUIPMENT
None

02-011

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT

Pond B (filled with sawdust to act as a filter aid).

2. STABILITY/CONDITION OF EMBANKMENTS

No embankments. See photo #10.

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*

[X] YES [ ] NO Erosion observed in pond area where slope is steep.

4. EVIDENCE OF DISPOSAL OF IGNITABLE OF REACTIVE WASTE

[X] YES [ ] NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT

[ ] YES [X] NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT

[ ] YES [X] NO

7. IMPOUNDMENT HAS LINER SYSTEM

[ ] YES [X] NO

7a. INTEGRITY OF LINER SYSTEM CHECKED

[ ] YES [ ] NO N/A

7b. FINDINGS

N/A

8. SOIL STRUCTURE AND SUBSTRUCTURE

Moderate Permeability

9. MONITORING WELLS

[ ] YES [X] NO

10. LENGTH, WIDTH, AND DEPTH

LENGTH 25 ft. WIDTH 25 ft. DEPTH 15 ft.

11. CALCULATED VOLUMETRIC CAPACITY

9,375 cubic feet

12. PERCENT OF CAPACITY REMAINING

0%

13. ESTIMATE FREEBOARD

None

14. SOLIDS DEPOSITION

[X] YES [ ] NO

15. DREDGING DISPOSAL METHOD

No dredging has been performed

16. OTHER EQUIPMENT

None

02-012

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
Pond C (final pond)

2. STABILITY/CONDITION OF EMBANKMENTS
No embankments exists

3. EVIDENCE OF SITE INSTABILITY (Erosion, Settling, Sink Holes, etc.)
[X] YES [ ] NO Erosion observed in ponds area where slope is steep. See photo #14.

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
[X] YES [ ] NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
[X] YES [ ] NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
[ ] YES [X] NO

7. IMPOUNDMENT HAS LINER SYSTEM
[ ] YES [X] NO

7a. INTEGRITY OF LINER SYSTEM CHECKED
[ ] YES [ ] NO N/A

7b. FINDINGS
N/A

8. SOIL STRUCTURE AND SUBSTRUCTURE
Moderate Permeability

9. MONITORING WELLS
[ ] YES [X] NO

10. LENGTH, WIDTH, AND DEPTH
LENGTH 50 ft. WIDTH 15 ft. DEPTH 10 ft.

11. CALCULATED VOLUMETRIC CAPACITY
7,500 cubic feet

12. PERCENT OF CAPACITY REMAINING
0-5%

13. ESTIMATE FREEBOARD
0-0.5 ft.

14. SOLIDS DEPOSITION
[X] YES [ ] NO

15. DREDGING DISPOSAL METHOD
No dredging has been performed

16. OTHER EQUIPMENT
None

02-013

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT

Pond D (used for rainwater only)

2. STABILITY/CONDITION OF EMBANKMENTS

No embankments

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*

[X] YES [ ] NO Erosion observed around ponds area where slope is steep.

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE

[X] YES [ ] NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT

[X] YES [ ] NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT

[ ] YES [X] NO

7. IMPOUNDMENT HAS LINER SYSTEM

[ ] YES [X] NO

7a. INTEGRITY OF LINER SYSTEM CHECKED

[ ] YES [ ] NO N/A

7b. FINDINGS

N/A

8. SOIL STRUCTURE AND SUBSTRUCTURE

Moderate Permeability

9. MONITORING WELLS

[ ] YES [X] NO

10. LENGTH, WIDTH, AND DEPTH

LENGTH 50 ft. WIDTH 25 ft. DEPTH 10 ft.

11. CALCULATED VOLUMETRIC CAPACITY

12,500 cubic feet

12. PERCENT OF CAPACITY REMAINING

3 to 4 ft.

13. ESTIMATE FREEBOARD

30 to 40%

14. SOLIDS DEPOSITION

[ ] YES [X] NO

15. DREDGING DISPOSAL METHOD

No dredging has been performed

16. OTHER EQUIPMENT

None

02-014

STORAGE FACILITIES SITE INSPECTION REPORT
Supplemental Report

INSTRUCTION
Answer and Explain as Necessary.

1. STORAGE AREA HAS CONTINUOUS IMPERVIOUS BASE
☐ YES ☒ NO

2. STORAGE AREA HAS A CONFINEMENT STRUCTURE
☐ YES ☒ NO

3. EVIDENCE OF LEAKAGE/OVERFLOW *(If "Yes", document where and how much runoff is overflowing or leaking from containment)*
☒ YES ☐ NO Evidence of overflow was seen in separator tank. Line from separator tank to pond is broken (see photo #6).

4. ESTIMATE TYPE AND NUMBER OF BARRELS/CONTAINERS
None

5. GLASS OR PLASTIC STORAGE CONTAINERS USED
☐ YES ☒ NO

6. ESTIMATE NUMBER AND CAPACITY OF STORAGE TANKS
Five-40,000 cubic feet total capacity

7. NOTE LABELING ON CONTAINERS
N/A

8. EVIDENCE OF LEAKAGE CORROSION OR BULGING OF BARRELS/CONTAINERS/STORAGE TANKS *(If "Yes", document evidence. Describe location and extent of damage. Take PHOTOGRAPHS)*
☐ YES ☒ NO

9. DIRECT VENTING OF STORAGE TANKS
☐ YES ☒ NO

10. CONTAINERS HOLDING INCOMPATIBLE SUBSTANCES *(If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)*
☐ YES ☒ NO

11. INCOMPATIBLE SUBSTANCES STORED IN CLOSE PROXIMITY *(If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)*
☐ YES ☒ NO

12. ADEQUATE CONTAINER WASHING AND REUSE PRACTICES
☐ YES ☐ NO N/A

13. ADEQUATE PRACTICES FOR DISPOSAL OF EMPTY STORAGE CONTAINERS
☐ YES ☐ NO N/A

02-015

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form	Additional Remark and/or Explanation
I-1	Active pentachlorophenol and creosote wood preserving plant. Separator tank and ponds used to recover and/or separate PCP and creosote from water are located on terrain with a slope up to 20%. Final pond contents are discharged down the slope to a nearby intermittent creek. Present capacity of plant is only 40% due to the considerable decrease in sales of preserved wood products.

02-016

SAMPLING POINTS

1 — POND C-AQUEOUS HAZARDOUS SAMPLE - LIQUID

2 - PATH OF CONTAMINANT - SOIL SAMPLE (OFF SITE).

3 - ADJACENT CREEK (UPSTREAM) SEDIMENT SAMPLE.

4 - ADJACENT CREEK (DOWNSTREAM) SEDIMENT SAMPLE.

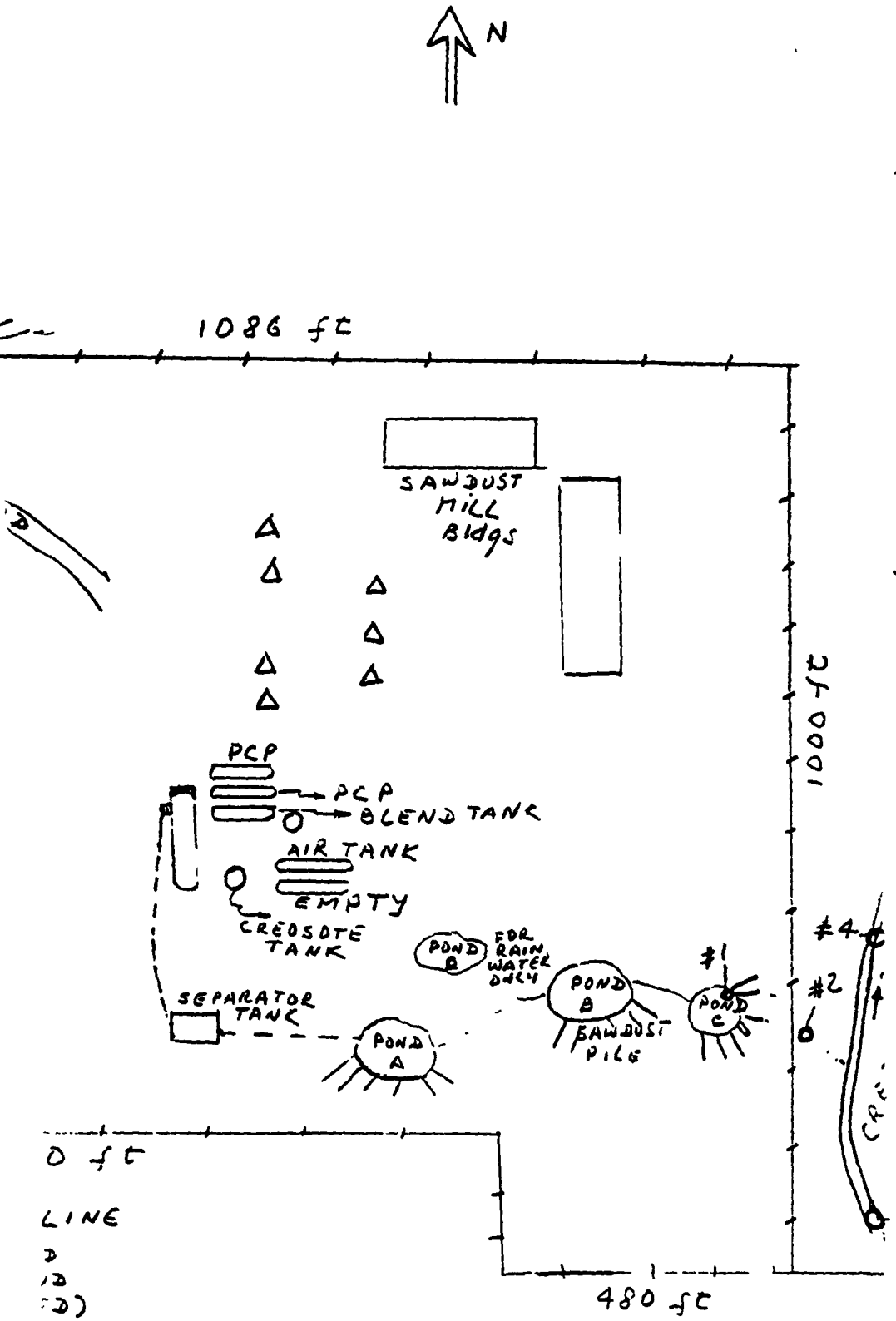
02-017

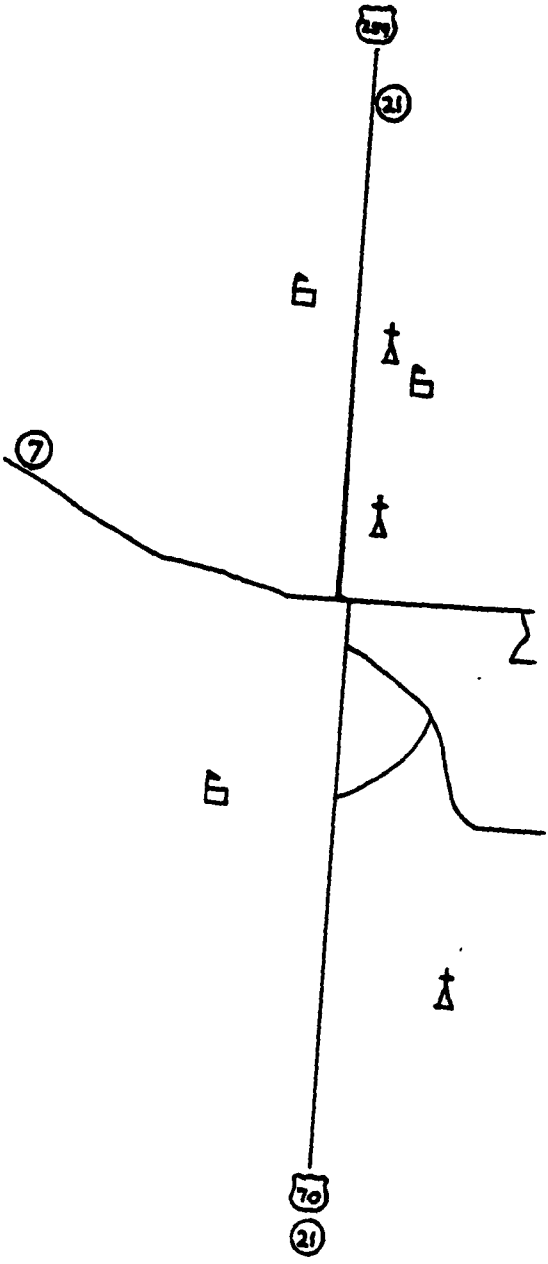
ASON LUMBER CO

HWY 70

Site Loca

Broken Bow
December 1





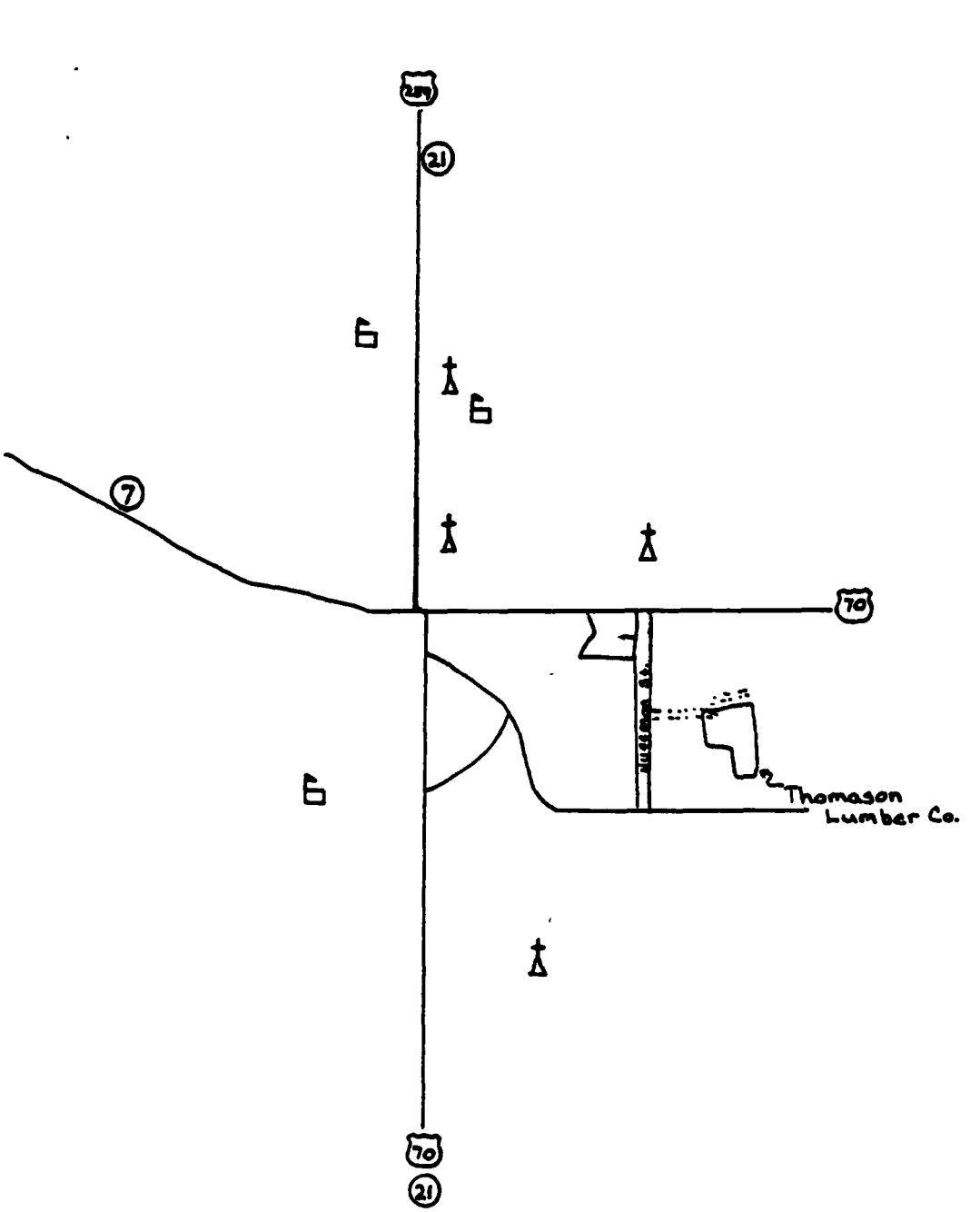
POINTS

ATTACHMENT 1

02-018

Site Location Map

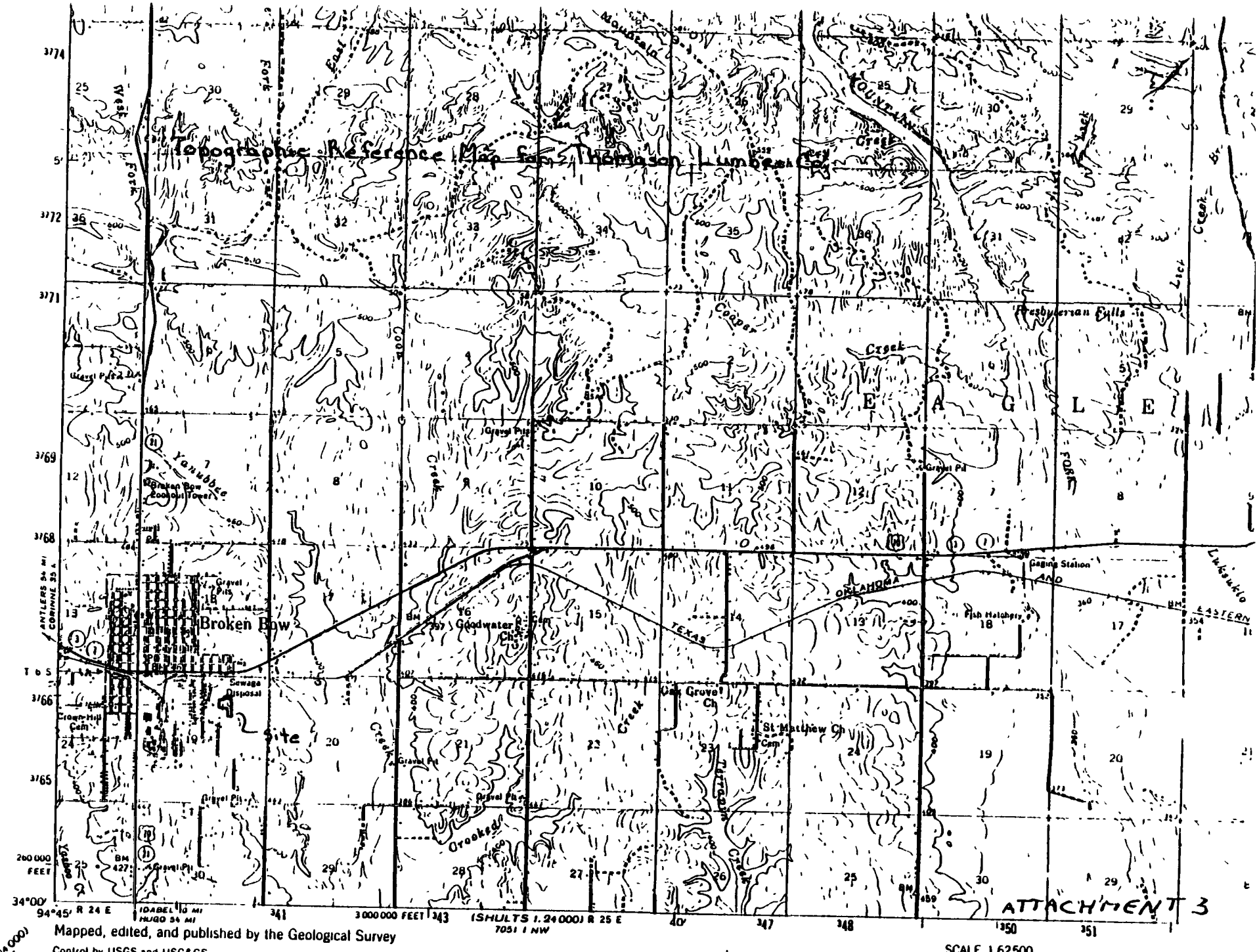
Broken Bow, OK
December 1980



ATTACHMENT 2

02-019

Not to Scale



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1955 Field check 1959

Polyconic projection 1927 North American datum
10 000 foot grid based on Oklahoma coordinate system, south zone
1000 meter Universal Transverse Mercator grid ticks,

SCALE 1 62500

1 0 1 2
3000 0 3000 6000 9000 12000 15000 18000
1 5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10 FOOT CONTOURS

GN MN

0°53' 8° 142 MILS

02-020

REFERENCE 3

U.S. Environmental Protection Agency, Geographical Exposure Modeling System (GEMS) database, compiled from U.S. Census Bureau 1990 data, accessed May 11, 1994.

THOMASON LUMBER COMPANY
GEMS SEARCH
MAY 11, 1994

COVERAGE

STATE	COUNTY	STATE NAME	COUNTY NAME
40	89	Oklahoma	Mc Curtain Co

CENTER POINT AT STATE : 40 Oklahoma
COUNTY : 89 Mc Curtain Co

REGION OF THE COUNTRY

Zipcode found: 74728 at a distance of 1.1 Km

STATE	CITY NAME	FIPSCODE	LATITUDE	LONGITUDE
OK	BROKEN BOW	40089	34.0250	94.7400

03-001

CENSUS DATA

==========

Thomason Lumber Company

LATITUDE 34: 1:24 LONGITUDE 94:43:42 1990 POPULATION

KM	0 - ¼ 0.00-.400	¼ - ½ .400-.800	½ 1 .800-1.60	1-2 1.60-3.20	2-3 3.20-4.80	3-4 4.80-6.40	SECTOR TOTALS
S 1	327	585	547	794	0	0	2253
S 2	0	0	0	0	1002	0	1002
S 3	0	0	446	0	0	0	446
S 4	0	316	994	586	0	0	1896
RING TOTALS	327	901	1987	1380	1002	0	5597

STAR STATION

==========

WBAN NUMBER	STATION NAME	LATITUDE	LONGITUDE	PERIOD OF RECORD	DISTANCE (km)
13977	TEXARKANA/WEBB AR	33.4500	94.0000	1963-1967	92.7
13964	FT SMITH AR	35.3333	94.3667	1955-1974	149.2
13923	SHERMAN/PERRIN TX	33.7167	96.6667	1966-1976	182.0
13957	SHREVEPORT LA	32.4667	93.8167	1970-1974	192.6
13972	TYLER/POUNDS TX	32.3667	95.4000	1950-1954	194.4
93992	ELDORADO/GOODWIN AR	33.2167	92.8000	1950-1954	199.6
13960	DALLAS/LOVE TX	32.8500	96.8500	1967-1971	236.0

U.S. SOIL DATA

03-002

==========

STATE : OKLAHOMA

LATITUDE : 34: 1:24 LONGITUDE : 94:43:42

THE STATION IS INSIDE H.U. 11140107

GROUND WATER ZONE	:	7		
RUNOFF SOIL TYPE	:	2		
EROSION	:	5.9760E-04		CM/MONTH
DEPTH TO GROUND WATER BETWEEN	:	9.1440E+02	AND 1.8290E+04	
FIELD CAPACITY FOR TOP SOIL	:	7.2000E-02		
EFFECTIVE POROSITY BETWEEN	:	1.0000E-02	AND 1.0000E-01	
SEEPAGE TO GROUNDWATER BETWEEN	:	2.7800E+02	AND 2.7800E+03	CM/MONTH
DISTANCE TO DRINKING WELL	:	2.7000E+04		CM

U.S. CITY

==========

STATE	PLACE NAME	FIPSCODE	LATITUDE	LONGITUDE
OK	BROKEN BOW	40089	34.0250	94.7400

03-003

REFERENCE 4

U.S. Department of Commerce, Weather Bureau, "Rainfall Frequency Atlas of the United Sates".

U.S. DEPARTMENT OF COMMERCE
Luther H. Hodges, Secretary

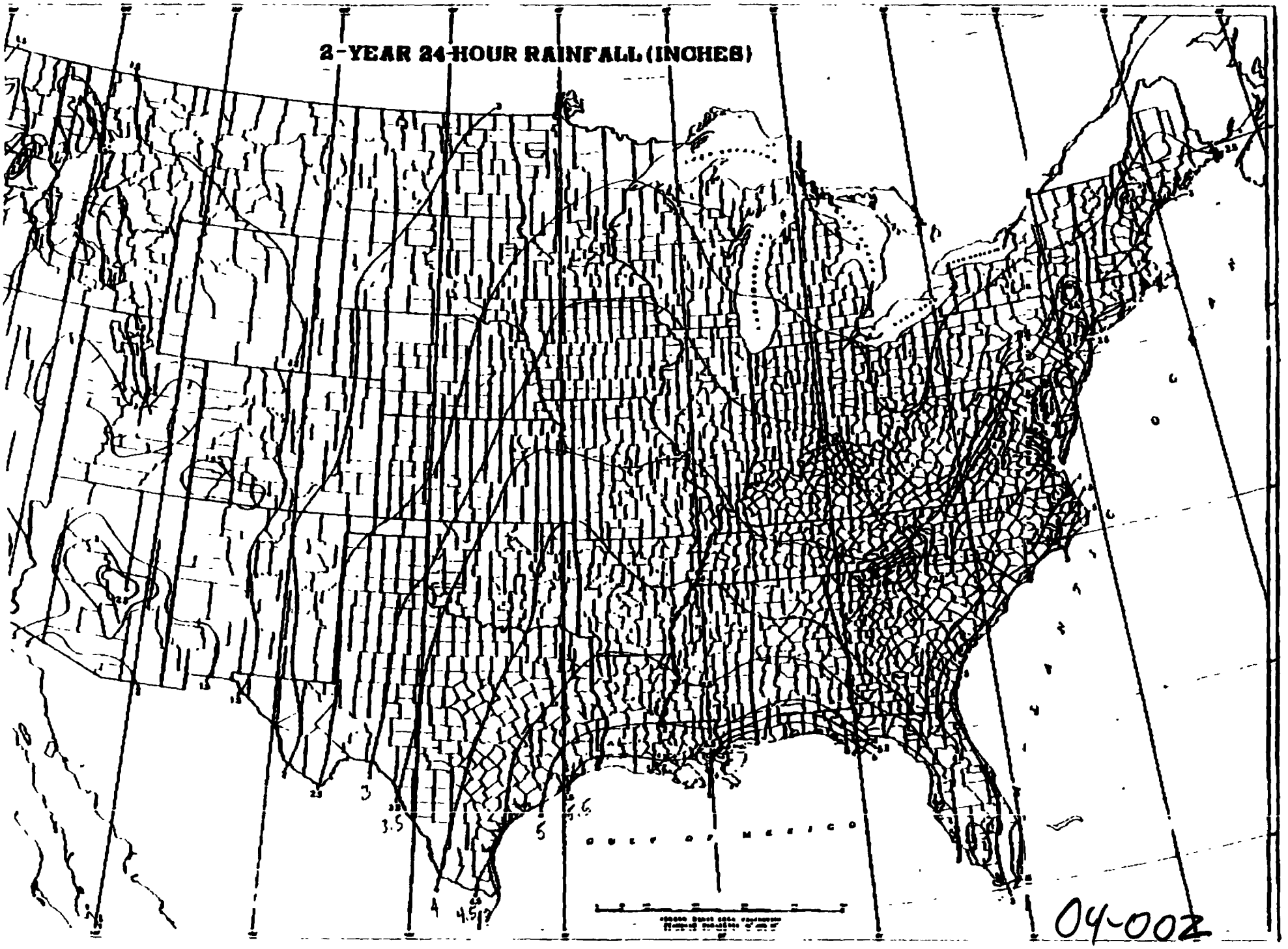
WEATHER BUREAU
F. W. Reichelderfer, Chief

TECHNICAL PAPER NO. 40

RAINFALL FREQUENCY ATLAS OF THE UNITED STATES

for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years

Prepared by
DAVID M. HERSHFIELD
Cooperative Studies Section, Hydrologic Services Division
for
Engineering Division, Soil Conservation Service
U.S. Department of Agriculture


2-YEAR 24-HOUR RAINFALL (INCHES)
3
3.5
4
4.5
5
5.5
GULF OF MEXICO
04-002

REFERENCE 5

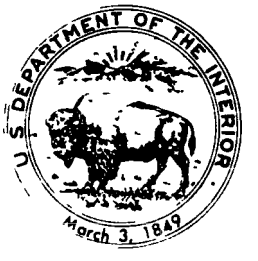
U.S. Geological Survey, Oklahoma Water Resource Board, "Statistical Summaries of Streamflow Records in Oklahoma, and Parts of Arkansas, Kansas, Missouri, and Texas", Water Resources Investigation No. 87-4205.

STATISTICAL SUMMARIES OF STREAMFLOW RECORDS IN OKLAHOMA AND PARTS OF ARKANSAS, MISSOURI, AND TEXAS THROUGH 1984

By David C. Heimann and Robert L. Tortorelli

U.S. GEOLOGICAL SURVEY
Water-Resources Investigations Report 87-4205

Prepared in cooperation with the
OKLAHOMA WATER RESOURCES BOARD



Oklahoma City, Oklahoma
1988

07338500 LITTLE RIVER BELOW LUKFATA CREEK NEAR IDABEL, OK

LOCATION.--Lat 33°56'28", long 94°45'30", in SE 1/4 SE 1/4 sec.14, T.7 S., R.24 E., McCurtain County, Hydrologic Unit 11140107, on left bank at downstream side of bridge on U.S. Highway 70 just downstream from Lukfata Creek, 5.0 mi northeast of Idabel, and at mile 103.4.

DRAINAGE AREA.--1,226 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REMARKS.--Flow regulated since June 1969 by Pine Creek Lake, 41.9 mi upstream.

STREAMFLOW REGULATED

MONTHLY AND ANNUAL MEAN DISCHARGES 1969-84

MONTH	MAXIMUM (CFS)	MINIMUM (CFS)	MEAN (CFS)	STANDARD DEVIATION (CFS)	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF
OCTOBER	2640	26	815	973	1.2	4.1
NOVEMBER	7890	46	1720	2470	1.4	8.6
DECEMBER	10300	146	2440	2670	1.1	12.2
JANUARY	3170	157	1460	974	0.66	7.3
FEBRUARY	6550	176	2320	1660	0.71	11.6
MARCH	7730	304	3080	1940	0.63	15.4
APRIL	6190	521	2240	1560	0.70	11.2
MAY	5800	673	2910	1560	0.54	14.6
JUNE	6040	47	1910	1980	1.0	9.5
JULY	1170	31	283	314	1.1	1.4
AUGUST	676	19	162	183	1.1	0.8
SEPTEMBER	6990	25	648	1720	2.7	3.2
ANNUAL	3420	676	1660	760	0.46	100

MAGNITUDE AND PROBABILITY OF ANNUAL LOW FLOW BASED ON PERIOD OF RECORD 1970-84

PERIOD (CONSECUTIVE DAYS)	DISCHARGE, IN CFS, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND NON-EXCEEDANCE PROBABILITY, IN PERCENT			
	2 50%	5 20%	10 10%	20 5%
1	21	13	9.8	7.5
3	24	16	12	9.8
7	26	17	14	11
14	29	19	15	12
30	35	23	19	16
60	57	30	22	17
90	85	40	29	23
120	144	57	36	24
183	372	164	109	79

MAGNITUDE AND PROBABILITY OF INSTANTANEOUS PEAK FLOW BASED ON 16 YEARS OF RECORD

DISCHARGE, IN CFS, FOR INDICATED RECURRENCE INTERVAL IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
11800	19100	29800	56300	93200	156000

STATION SKEW = 2.90

MAGNITUDE AND PROBABILITY OF ANNUAL HIGH FLOW BASED ON PERIOD OF RECORD 1969-84

PERIOD (CONSECUTIVE DAYS)	DISCHARGE, IN CFS, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	12000	18500	26400	42600	61600	89400
3	11000	16400	22400	33900	46400	63700
7	8260	11700	14900	20300	25600	32100
15	7150	9700	11500	13900	15700	17700
30	5690	7780	9160	10900	12200	13500
60	4120	5600	6550	7730	8590	9440
90	3390	4660	5490	6540	7310	8080

DURATION TABLE OF DAILY MEAN FLOW FOR PERIOD OF RECORD 1969-84

DISCHARGE, IN CFS, WHICH WAS EQUALED OR EXCEEDED FOR INDICATED PERCENT OF TIME																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
11300	7620	5640	3930	2760	1430	791	449	263	142	72	38	27	20	16	14	10

05-002

REFERENCE 6

Thomas Burger, Environmental Resource Research Assisstant, Ok Department of Health, "Site Inspection Report", September 26, 1980.

EPA

POTENTIAL HAZARDOUS WASTE SITE
I. SECTION REPORT

REGION: 6 | SITE NUMBER (to be assigned by HQ): OKO3901

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (E.N-335); 401 M St., SW; Washington, DC 20460.

REVIEWED BY

I. SITE IDENTIFICATION OKD007395524

A. SITE NAME: Thomason Lumber Co
B. STREET (or other identifier):
C. CITY: Broken Bow
D. STATE: OK
E. ZIP CODE: 74725
F. COUNTY NAME: McCurtain

G. SITE OPERATOR INFORMATION
1. NAME: Art Thomason
2. TELEPHONE NUMBER: (405) 584-2452
3. STREET:
4. CITY: Broken Bow
5. STATE: OK
6. ZIP CODE:

H. REALTY OWNER INFORMATION (if different from operator of site)
1. NAME: NA
2. TELEPHONE NUMBER:
3. CITY:
4. STATE:
5. ZIP CODE:

I. SITE DESCRIPTION: PCP & creosote wood treatment

J. TYPE OF OWNERSHIP
☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.): 10-15-80
B. APPARENT SERIOUSNESS OF PROBLEM
☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION
1. NAME: Thomas L. Burger
2. TELEPHONE NUMBER: (405) 271-5338
3. DATE (mo., day, & yr.): 9-26-80

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION
1. NAME: Thomas L. Burger
2. TITLE: Environmental Research Asst.
3. ORGANIZATION: OSDH
4. TELEPHONE NO. (area code & no.): (405) 271-5338

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
none		
		SUPERFUND FILE
		JUN 10 1992

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Art Thomason	Pres	Same as Co.
Richard Thomason	Vice-pres.	
"Doc" Thomason	part owner	
Joe Roberts	Treatment operator	
		06-001

REORGANIZED

EPA

HAZARDOUS WASTE SITE INSPECTION REPORT

REGION: 6 | SITE NUMBER (to be assigned by HQ): OKD03701

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: Thomason Lumber Co
B. STREET (or other identifier):
C. CITY: Broken Bow
D. STATE: OK
E. ZIP CODE: 74728
F. COUNTY NAME: McCurtain

G. SITE OPERATOR INFORMATION
1. NAME: Art Thomason
2. TELEPHONE NUMBER: (405) 584-2453
3. STREET:
4. CITY: Broken Bow
5. STATE: OK
6. ZIP CODE:

H. REALTY OWNER INFORMATION (if different from operator of site)
1. NAME: NA
2. TELEPHONE NUMBER:
3. CITY:
4. STATE:
5. ZIP CODE:

I. SITE DESCRIPTION: PCP & creosote wood treatment

J. TYPE OF OWNERSHIP
☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.): 10-15-80
B. APPARENT SERIOUSNESS OF PROBLEM
☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION
1. NAME: Thomas L Burger
2. TELEPHONE NUMBER: (405) 271-5338
3. DATE (mo., day, & yr.): 9-26-80

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION
1. NAME: Thomas L. Burger
2. TITLE: Environmental Research Asst.
3. ORGANIZATION: ODH
4. TELEPHONE NO. (area code & no.): (405) 271-5338

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Noel		

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Art Thomason	Pres	Thomason Lumber Co.
Richard Thomason	Vice-pres	
"Doc" Thomason	part owner	
Joe Roberts	treatment operator	

06-002

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS: [X] a. GROUND [ ] b. AERIAL

2. PHOTOS IN CUSTODY OF: OSDH

D. SITE MAPPED?

[ ] YES. SPECIFY LOCATION OF MAPS: UKN

E. COORDINATES

1. LATITUDE (deg.-min.-sec.): 34° 1' 28"

2. LONGITUDE (deg.-min.-sec.): 64° 43' 27"

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

[ ] 2. INACTIVE (Those sites which no longer receive wastes.)

[ ] 3. OTHER (specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES (specify generator's four-digit SIC Code): 2491

C. AREA OF SITE (in acres): 19

D. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [X] 2. YES (specify): treatment shed

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND	X	5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

[ ] 1. STORAGE [ ] 2. INCINERATION [ ] 3. LANDFILL [ ] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL

[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[X] 1. LIQUID [ ] 2. SOLID [X] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[ ] 1 CORROSIVE [ ] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE

[X] 5 TO IC [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE

[ ] 9 OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

no

06-003

Continued From Front

...ASTE RELATED INFORMATION (continued)

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SULIDS	f. OTHER
AMOUNT: UKN	AMOUNT: UKN	AMOUNT:	AMOUNT:	AMOUNT:	AMOUNT:
UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE:
[ ] (1) PAINT PIGMENTS	[X] (1) OILY WASTES	[ ] (1) HALOGENATED SOLVENTS	[ ] (1) ACIDS	[ ] (1) FLYASH	[ ] (1) LABORATORY, PHARMACEUT.
[ ] (2) METALS SLUDGES	[ ] (2) OTHER(specify):	[ ] (2) NON-HALOGNTD. SOLVENTS	[ ] (2) PICKLING LIQUORS	[ ] (2) ASBESTOS	[ ] (2) HOSPITAL
[ ] (3) POTW	PCP & creosote contaminated oils	[ ] (3) OTHER(specify):	[ ] (3) CAUSTICS	[ ] (3) MILLING/MINE TAILINGS	[ ] (3) RADIOACTIVE
[ ] (4) ALUMINUM SLUDGE			[ ] (4) PESTICIDES	[ ] (4) FERROUS SMELTING WASTES	[ ] (4) MUNICIPAL
[X] (5) OTHER(specify): PCP & creosote treatment sludge			[ ] (5) DYES/INKS	[ ] (5) NON-FERROUS SMLTG. WASTES	[ ] (5) OTHER(specify):
			[ ] (6) CYANIDE	[ ] (6) OTHER(specify):	
			[ ] (7) PHENOLS		
			[ ] (8) HALOGENS		
			[ ] (9) PCB		
			[ ] (10) METALS		
			[ ] (11) OTHER(specify)		

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X') a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY (mark 'X') a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
PCP	X	X			X			87-86-5	UKN	
creosote		X			X			8001-58-9	UKN	

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

[ ] A. HUMAN HEALTH HAZARDS

no

06-004

Continued From Page 4

VIII. HAZARD DESCRIPTION (cont.

☐ 9. NON-WORKER INJURY/EXPOSU...

NN

☐ C. WORKER INJURY/EXPOSURE

NN

☐ D. CONTAMINATION OF WATER SUPPLY

slight: evidence of chronic discharges and spills that would, through runoff reach Little River via Yanubbe Creek. Distance to river (6 mi) and ~~low~~ low solubility of PCP & creosote would be mitigating factors

☐ E. CONTAMINATION OF FOOD CHAIN

NN

☐ F. CONTAMINATION OF GROUND WATER

UKN

☐ G. CONTAMINATION OF SURFACE WATER

See VIII D.

06-005

Continued From Front

VIII. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA

slight : spill scars. < 1/5 acre total

☐ I. FISH KILL

UKN

☐ J. CONTAMINATION OF AIR

no

☐ K. NOTICEABLE ODORS

no

☐ L. CONTAMINATION OF SOIL

slight - mod., but confined to site.

☐ M. PROPERTY DAMAGE

UKN

06-006

Continued From Page 6

VIII. HAZARD DESCRIPTION (contin

☐ N. FIRE OR EXPLOSION

no

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

Evidence of chronic overflow of separator. Spills ineffectively contained by earthen dam. Sample taken.

☐ P. SEWER, STORM DRAIN PROBLEMS

no

☐ Q. EROSION PROBLEMS

no

☐ R. INADEQUATE SECURITY

area not fenced

☐ S. INCOMPATIBLE WASTES

no

06-007

VIII. HAZARD DESCRIPTION (continued)

☐ T. MIDNIGHT DUMPING

no

☐ U. OTHER (specify):

NA

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS	none			
2. IN COMMERCIAL OR INDUSTRIAL AREAS	10	onsite	2	on site
3. IN PUBLICLY TRAVELLED AREAS	NA			
4. PUBLIC USE AREAS (parks, schools, etc.)	NA			

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
50-100 feet	~~East~~ west	none known
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)**	**F. DIRECTION TO DRINKING WATER SUPPLY**
0- ~~-~~0 GPM	6 mi	~~East~~ East

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS ☒ 2. COMMUNITY (specify town): > 15 CONNECTIONS Broken Bow

☐ 3. SURFACE WATER ☐ 4. WELL

Continue On Page 9

06-008

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

4. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/ buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
none	known			

5. RECEIVING WATER

1. NAME: Yamabee Creek

☐ 2. SEWERS ☒ 3. STREAMS/RIVERS ☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER (specify):

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

pub & private water supply, fish & wildlife, ag, M&I cooling water, 1° & 2° rec, aesthetics, small mouth bass.

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

none of these

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
	1. SAND fine sandy loam				
	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)
☐ D. MODERATE (10 to .1 cm/sec.) ☐ E. LOW (.1 to .001 cm/sec.) ☐ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS:

H. DISCHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS

I. SLOPE

1. ESTIMATE % OF SLOPE: 5-30%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.: west — good condition

J. OTHER GEOLOGICAL DATA

06-099

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN
UKN							

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE ☐ YES (summarize in this space)

UKN

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

06-010

REFERENCE 7

FAX: Subject: Public Water Supply for Broken Bow. From: Tim Ward, Oklahoma Department of Environmental Quality, To: Ariadne Lytwyn, Geologist, Fluor Daniel, Inc., June 15, 1994.

MARK S. COLEMAN
Executive Director

DAVID WALTERS
Governor

State of Oklahoma

DEPARTMENT OF ENVIRONMENTAL QUALITY

FAX TRANSMITTAL SHEET

DATE: 6/15/94

TO: ARIADNE LYTWIN

FAX #: 312-630-4993

AGENCY/CO:

MAIL CODE/ DEPARTMENT:

PHONE #:

FROM: TIM WARD

FAX #: (405) 271-7339

AGENCY: OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

SERVICE/ DIVISION: WQD

PHONE #:

1 **# OF PAGES (INCLUDING THIS SHEET)**

PWSID	SYSTEM	SOURCEID	SOURCE	entrynum	AQUIFER	DEPTH	LOCATION	ACTIVITY	TYPE
1010214	BROKEN BOW	01	MT FORK RIVER	1	0102		S06T06SR26EIM	A	C

Surface water intake 8.0 miles NE of the site

PWSID	SYSTEM	SOURCEID	SOURCE	entrynum	AQUIFER	DEPTH	LOCATION	ACTIVITY	TYPE
1021220	STILLWATER	01	KAW RESERVOIR	1	0212		S36T26NR03EIM	A	C

07-001

MARK S. COLEMAN
Executive Director

DAVID WALTERS
Governor

State of Oklahoma

DEPARTMENT OF ENVIRONMENTAL QUALITY

FAX TRANSMITTAL SHEET

DATE: 6/15/94

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FAX #: (405) 271-7339

AGENCY: OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

SERVICE/ DIVISION: WQD

PHONE #:

1 # OF PAGES (INCLUDING THIS SHEET)

COMMENTS:

POPULATION OF:

STILLWATER 40,000

BROKEN BOW 3,965

07-002

1000 Northeast Tenth Street, Oklahoma City, Oklahoma 73117-1212

REFERENCE 8

U.S. Geological Survey, 7.5-Minute Topographic Maps of Oklahoma: Broken Bow, 1981; Shults, 1950, photorevised 1970.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF OKLAHOMA

BROKEN BOW QUADRANGLE
OKLAHOMA–MC CURTAIN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 BROKEN BOW 15' QUADRANGLE

Mapped, edited, and published by the Geological Survey
in cooperation with the Oklahoma Highway Department,
Oklahoma Water Resources Board, and Oklahoma State Soil
Conservation Board

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs
taken 1977. Field checked 1978. Map edited 1981

Projection and 10,000-foot grid ticks: Oklahoma coordinate
system, south zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 15
1927 North American Datum
To place on the predicted North American Datum 1983
move the projection lines 7 meters south and
20 meters east as shown by dashed corner ticks
There may be private inholdings within the boundaries of
the National or State reservations shown on this map
Red tint indicates area in which only landmark buildings are shown

UTM GRID AND 1981 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

0°57' 17 MILS — 6° 107 MILS

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND BY THE OKLAHOMA GEOLOGICAL SURVEY, NORMAN, OKLAHOMA 73069
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route — U. S. Route — State Route

BROKEN BOW, OKLA.
SW/4 BROKEN BOW 15' QUADRANGLE
N3400—W9437.5/7.5

1981

DMA 7052 II SW—SERIES V883

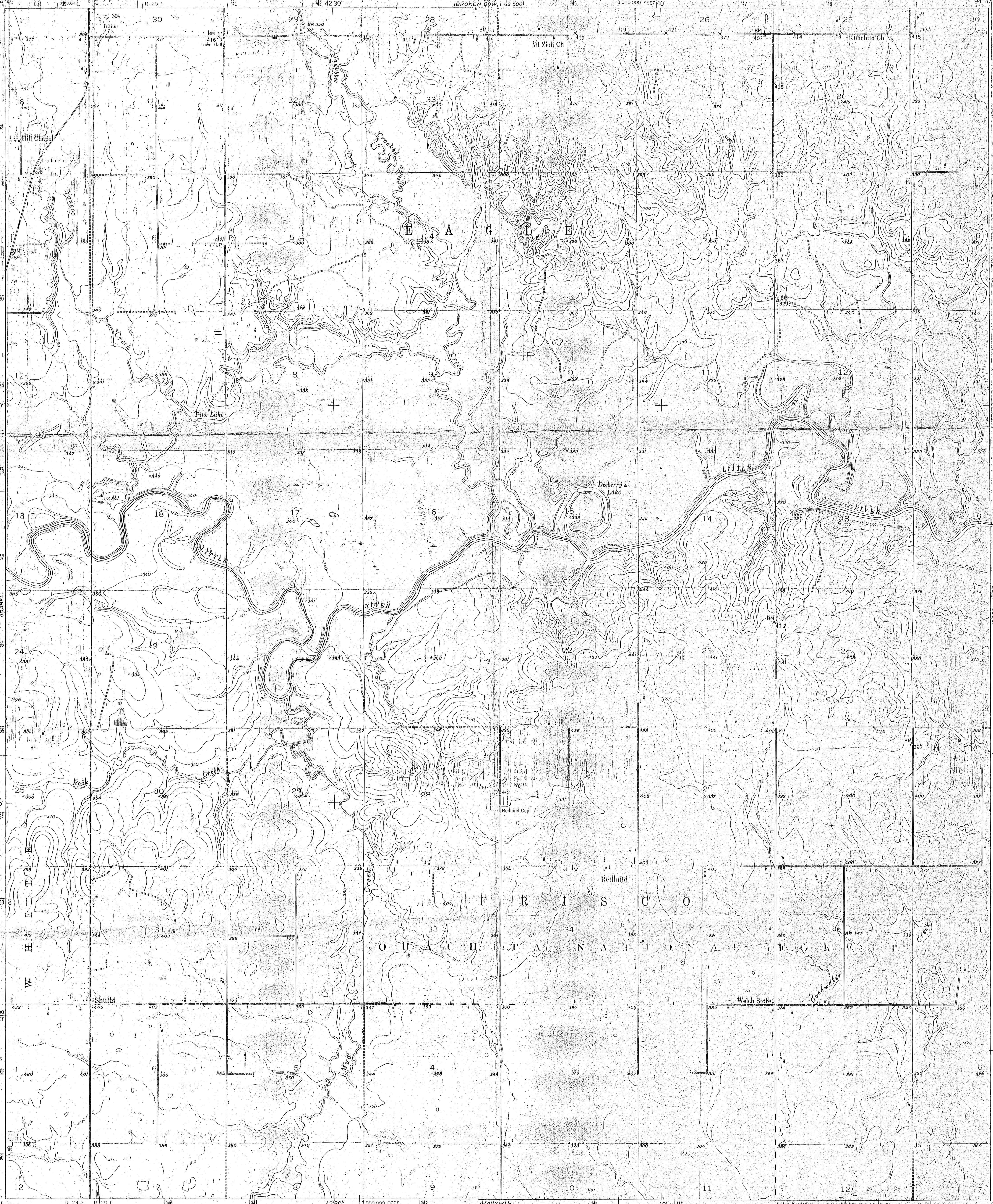
AND BY THE OKLAHOMA GEOLOGICAL SURVEY, NORMAN, OKLAHOMA 73069
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

1950

AMS 7051 I NW—SERIES V883

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SHULTS QUADRANGLE
OKLAHOMA-MC CURTAIN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Culture and drainage in part compiled from aerial photographs taken 1949
Topography by plane-table methods 1949–1950

Polyconic projection. 1927 North American datum
10,000-foot grid based on Oklahoma coordinate system, south zone
1000-metre Universal Transverse Mercator grid ticks, zone 15, shown in blue

UTM GRID AND 1975 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
0°56' 17 MILS
6½° 116 MILS

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND BY THE OKLAHOMA GEOLOGICAL SURVEY, NORMAN, OKLAHOMA 73069
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

OKLAHOMA
QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
U. S. Route — State Route

SHULTS, OKLA.
N3352.5—W9437.5/7.5
1950
AMS 7051 I NW—SERIES V883

REFERENCE 9

LETTER. Subject: Laboratory Report - Thomason Lumber Company. From: William Langley, Chief Laboratory Services Section, EPA, To: William Librizzi, Surveillance & Analysis Division, February 9, 1981.

UNITED STATE ENVIRONMENTAL PROTECTION . CY
. . OOD DRIVE HOUSTON, TEXAS

DATE: February 9, 1981

SUBJECT: Laboratory Report: Thomason Lumber Company, OK 03701

FROM: William D. Langley, Chief
Laboratory Services Section, 6ASAHL

TO: William J. Librizzi, Director
Surveillance and Analysis Division, 6ASA

Thru: Malcolm F. Kallus, Chief, Houston Branch, 6ASAH

One 8-ounce water sample and three soil/sediment samples collected at or near the subject site by FIT personnel on December 15, 1980, were received at the Houston Branch Laboratory on December 19, 1981. We were requested to perform base/neutral and acid extractions of the samples, to analyze the acid extract for pentachlorophenol, to retain the base/neutral extract for possible analysis at a later date, and to retain the original sample for possible analysis for dioxin at a later date. We have complied with these requests; and additionally, we have performed a total phenols by 4-aminoantipyrine analysis as a possible, although not absolute, indicator of creosote. It should be noted that pentachlorophenol does not respond to the total phenols by 4AAP analysis.

The results of our analyses are presented below. Also attached to this report is a copy Chain of Custody Record No. 6-0154 which accompanied these samples.

1. HNB Laboratory No. 3619; Tag No. 6-1147

Thomason Lumber Co
OKD 007 335 524

Source: Thomason Lumber Company; OK 03701
Station 1; Final Pond #C
8 ounce water sample.

Time Collected: 1615 hours.

Date Collected: 12/15/80.

SUPERFUND FILE
JUN 10 1992
REORGANIZ--

Parameter Analyzed	Concentration Found
Pentachlorophenol	50 ug/1 (ppb)
Total Phenols by 4AAP	1,715 "

2. HNB Laboratory Number 3620; Tag No. 6-1144

Source: Thomason Lumber Company; OK 03701
Station 2; 185 feet east of Pond #C
Soil.

Time Collected: 1545 hours.

Date Collected: 12/15/80.

REFERENCE 10

LETTER. Subject: Sensitive Environment in a 4-mile Radius. From: Ian Butler, Data Coordinator, Oklahoma Natural Heritage Inventory, To: Ariadne Lytwyn, Geologist, Fluor Daniel, Inc., June 1, 1994.

Oklahoma Biological Survey

Oklahoma Natural Heritage Inventory

OKLAHOMA BIOLOGICAL SURVEY
[illegible] Chesapeake Street
Norman, Oklahoma 73019-0575 USA
[illegible]
FAX [illegible]

Ariadne Lytwyn
Fluor Daniel
200 West Monroe Street
Chicago, IL 60606

June 1, 1994

Dear Ariadne Lytwyn,

This letter is in response to your request for information on possible endangered species or other elements of biological significance at the following sites:

(1) Latitude 34 01 24 N and Longitude 94 43 42 W in McCurtain County, Oklahoma

(2) Latitude 34 24 22 N and Longitude 95 26 59 W in Pushmataha County, Oklahoma

(3) Latitude 36 09 37 N and Longitude 97 04 52 W in Payne County, Oklahoma

The Oklahoma Natural Heritage Inventory maintains a database on the status and location of rare species and significant ecological communities in Oklahoma. We have reviewed the information currently in the Heritage Inventory database and found no records of on site-elements. However, elements were found within a four mile radius from the sites. These are listed on the attached table.

The Heritage Inventory database is the most current comprehensive one available on the rare biota of Oklahoma. However, such a database is only as complete as the information that has been collected. For this reason, we cannot state for certain whether or not a given site harbors rare species or significant communities. We suggest you also contact the Environmental Division of the Oklahoma Department of Wildlife Conservation, as they may have site specific information of which we are unaware.

Thank you for the opportunity to respond to your request.

Sincerely,

Stephanie Love

for Ian H. Butler
Data Coordinator

IHB:sdl

10-001

OKLAHOMA NATURAL HERITAGE INVENTORY
TABLE OF PROXIMAL ELEMENT OCCURRENCES

REQUESTED BY: Fluor Daniel
DATE OF REQUEST: June 1, 1994

SITE SPECIES NAME		STATUS FED	STATE	ONHI RANK GLOBAL	STATE	LAST SEEN
SITE NAME: Latitude 34 01 24 N, Longitude 95 26 59 W						
Streptanthus squamiformis (A Jewelflower: forb)	*	C2	none	G3	S1	1930
Draba aprica (Open-Ground Whitlow-Grass: forb)	*	3C	none	G3	S1	1978
Aristolochia reticulata (Texas Dutchman's-Pipe: forb)	*	none	none	G4	S2	1978
Notropis atrocaudalis (Blackspot Shiner: fish)	*	none	none	G4	S1	1985
Notropis ortenburgeri (Kiamichi Shiner: fish)	*	none	none	G3	S3	1955
Villosa iris (Rainbow: mussel)	*	none	none	G4	S1	1983
Villosa lienosa (Little Spectacle Case: mussel)	*	none	none	G3	S2	1948

SITE SPECIES NAME		STATUS FED	STATE	ONHI RANK GLOBAL	STATE	LAST SEEN
SITE NAME: Latitude 34 24 22 N, Longitude 95 26 59 W						
Notropis ortenburgeri (Kiamichi Shiner: fish)	*	none	none	G3	S3	1973
Clematis drummondii (Drummond Leather-Flower: forb)	*	none	none	G5	S1S2	1973

Elements occur on-site unless otherwise noted as follows:

* Occurrence within approximate 4 mile radius of site.

10-002

SITE SPECIES NAME	STATUS FED	 STATE	ONHI RANK GLOBAL	 STATE	LAST SEEN
SITE NAME: **Latitude 36 09 37 N, Longitude 97 04 52 W**					
Penstemon oklahomensis *	none	none	G3	S3	1977
(Oklahoma Beardtongue: forb)					
Ulmus americana- Celti spp.	none	none	G2G3	S2S3	1977
(Centeral Bottomland Forest: bottomland community)					

Elements occur on-site unless otherwise noted as follows:

* Occurrence within approximate 4 mile radius of site.

10-003

OKLAHOMA NATURAL HERITAGE INVENTORY
EXPLANATION OF NATURAL HERITAGE RARITY RANKINGS

Each species and natural community is given two ranks, a global (G) rank reflecting its rarity throughout the world, and, a state (S) rank reflecting its rarity within Oklahoma.

Global Rank

- G1 Critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor of its biology making it especially vulnerable to extinction.
- G2 Imperiled globally because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of other factors demonstrably making it very vulnerable to extinction throughout its range.
- G3 Either very rare and local throughout its range, or found locally (even abundantly at some of its locations) in a restricted range, or because of other factors making it vulnerable to extinction throughout its range; in the range of 21 to 100 occurrences.
- G4 Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- G5 Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- GH Historically known, with the expectation that it may be rediscovered.
- GX Believed to be extinct.
- GU Not yet ranked.

State Rank

- S1 Critically imperiled in Oklahoma because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor of its biology making it especially vulnerable to extinction.
- S2 Imperiled in Oklahoma because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of other factors demonstrably making it very vulnerable to extinction throughout its range.
- S3 Rare and local in Oklahoma(though it may be abundant at some of its locations); in the range of 21 to 100 occurrences.
- S4 Apparently secure in Oklahoma.
- S5 Demonstrably secure in Oklahoma.
- SH Historically known from Oklahoma, but possibly extirpated; not seen in the last 15 years.
- SR Reported in Oklahoma, but not documented.
- SRF Falsely reported in Oklahoma.
- S#M* Migratory.
- S#N Nonbreeding in Oklahoma.
- S#B Breeding in Oklahoma
- SU Not yet ranked.
- SX Believed to be extirpated from Oklahoma.

* Rank number (#) included to indicate status.

Other Rank Symbols

10-004

- ? There is a question about the given rank.
- Q There are taxonomic questions concerning a species.
- T Associated with global rank, indicating a global rarity rank for a particular subspecific taxon.

EXPLANATION OF STATE AND FEDERAL STATUS ABBREVIATIONS

State (Status determined by the Oklahoma Department of Wildlife Conservation)

E Endangered in Oklahoma.
T Threatened in Oklahoma.
SN State nominated for listing as threatened or endangered.
SS Species of Special Concern
SS1 - a species that current evidence indicates is especially vulnerable to extirpation because of limited range, low population or other factors.
SS2 - species identified by technical experts as possbily threatened or vulnerable to extirpation but for which additional information is needed.
P Statewide closed season.

Federal (Status determined by the US Fish and Wildlife Service, Office of Endangered Species)

LE Listed Endangered.
PE Proposed for listing as Endangered.
LT Listed Threatened.
PT Proposed for listing as Threatened.
LELT Listed Endangered in some USFWS regions and Threatened in others.
C1 Category 1 species for listing. Species determined to be in need of protection by listing as Endangered or Threatened.
C2 Category 2 species for listing. Species needs additional study to determine whether it should be listed as Endangered or Threatened.
C2* Category 2 species recommended for elevation to C1 status.
3C Category 3 species. Currently, the species is not recommended for listing as Endangered or Threatened.

Additional information about the federal or state status of species may be available directly from, respectively, the US Fish and Wildlife Service, Ecological Services Office, Tulsa, (918) 581-7458, or, from the Oklahoma Department of Wildlife Conservation, Natural Resources Section, Oklahoma City, (405) 521-4616.

REFERENCE 11

MEMORANDUM. Subject: Thomason Lumber Company. From: James Adams, Oklahoma Water Resource Board, To: Project Files, March 7, 1985.

Oklahoma Water Resources Board

Date: March 7, 1985
1330 hrs.

Memo to the files

From: James C. Adams JCA

Subject: Thomason Lumber - Compliance Activity

OKD007335524

Remarks:

Tim Smith and I stopped and visited with Earl Hayes, the new owner of Thomason Lumber. We discussed the consent agreement at length and he agreed to sign it and respond in writing as to the items in the agreement. We then inspectd the facility and discussed the plans to recover the lagoon.

The dike around the treating site was satisfactory. His plan to remove the lagoons, wastewater, contaminated soil, and contaminated sawdust was satisfactory.

I inspected the lagoon around the product catch basin and evaportaion tanks and was concerned about the lagoon walls structural stability and permeability. I told Mr. Hayes to have his Engineer evaluate these. The lagoon showed signs of slumping and I questioned if the clay would prevent the product from escaping the lagoon walls.

Mr. Hayes said he would write Mr. Jarman, returning the signed consent agreement and discuss the issues requested in the agreement.

11-001

REFERENCE 12

Thomas Burger, Oklahoma State Department of Health, "Identification and Preliminary Assessment", September 15, 1980.

IDENTIFICATION AND PRELIMINARY ASSESSMENT

6 | OK03701

NOTE: This form is completed for each [illegible] potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries or site inspections.

REVIEWED BY: L.D. Wright 11-21-80

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (Preliminary Assessment). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

OKD007836324

A. SITE NAME: Thomason Lumber Co.

B. STREET (or other identifier):

C. CITY: Broken Bow

D. STATE: OK

E. ZIP CODE: 74728

F. COUNTY NAME: McCurtain

G. OWNER/OPERATOR (If known)

1. NAME: Art Thomason

2. TELEPHONE NUMBER: (405) 584-2452

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6 UNKNOWN

I. SITE DESCRIPTION

PCP & creosote wood treatment

J. HOW IDENTIFIED (i.e., citizen's complaints, OSHA citations, etc.)

I.W.S.

K. DATE IDENTIFIED (mo., day, & yr.)

9-15-80

L. PRINCIPAL STATE CONTACT

1. NAME: Don Hensch

2. TELEPHONE NUMBER: (405) 271-5338

II. PRELIMINARY ASSESSMENT (complete this section last)

A. APPARENT SERIOUSNESS OF PROBLEM:

☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE ☒ 5. UNKNOWN

B. RECOMMENDATION

☐ 1. NO ACTION NEEDED (no hazard)

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☒ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR: 9-17-80
b. WILL BE PERFORMED BY: Burger

☐ 4. SITE INSPECTION NEEDED (low priority)

C. PREPARER INFORMATION

1. NAME: Thomas L. Burger

2. TELEPHONE NUMBER: (405) 271-5338

3. DATE (mo., day, & yr.): 5-15-85

III. SITE INFORMATION

A. SITE STATUS

☒ 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

☐ 2. INACTIVE (Those sites which no longer receive wastes).

☐ 3. OTHER (specify): SUPERFUND-ED (Those sites that include such incidents where no regular or continuing use of the site for waste disposal has occurred.)

JUN 10 1992

B. IS GENERATOR ON SITE?

☐ 1. NO ☒ 2. YES (specify generator's four-digit SIC Code): 2491 REORGANIZ...

C. AREA OF SITE (in acres): 19

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES
1. LATITUDE (deg.-min.-sec.)
2. LONGITUDE (deg.-min.-sec.)

E. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO ☒ 2. YES (specify): treatment shed

12-001

1 of 6

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND	X	5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESS.		7. UNDERGROUND INJECT
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

NA

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1 UNKNOWN ☒ 2. LIQUID ☒ 3. SOLID ☐ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1. UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4. RADIOACTIVE ☐ 5. HIGHLY VOLATILE
☒ 6. TOXIC ☐ 7. REACTIVE ☐ 8. INERT ☐ 9. FLAMMABLE

☐ 10. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Not

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT: UKN	AMOUNT:	AMOUNT:	AMOUNT:	AMOUNT:	AMOUNT:
UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASU
☐ (1) PAINT, PIGMENTS	☒ (1) OILY WASTES	☐ (1) HALOGENATED SOLVENTS	☐ (1) ACIDS	☐ (1) FLYASH	☐ (1) LABORAT PHARMAC
☐ (2) METALS SLUDGES	☐ (2) OTHER (specify):	☐ (2) NON-HALOGNTD SOLVENTS	☐ (2) PICKLING LIQUORS	☐ (2) ASBESTOS	☐ (2) HOSPITAL
☐ (3) POTW		☐ (3) OTHER (specify):	☐ (3) CAUSTICS	☐ (3) MILLING/ MINE TAILINGS	☐ (3) RADIOACT
☐ (4) ALUMINUM SLUDGE			☐ (4) PESTICIDES	☐ (4) FERROUS SMLTG. WASTES	☐ (4) MUNICIPAL
☒ (5) OTHER (specify): PCP & creosote sludge	PCP & creosote contaminated oils		☐ (5) DYES/INKS	☐ (5) NON-FERROUS SMLTG. WAS	☐ (5) OTHER (sp
			☐ (6) CYANIDE	☐ (6) OTHER (spec	
			☐ (7) PHENOLS		
			☐ (8) HALOGENS		
			☐ (9) PCB		
			☐ (10) METALS		
			☐ (11) OTHER (specify)		

12-002

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CO... WHICH MAY BE ON THE SITE (place in o... order of hazard).

PCP
creosote

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

NA

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

12-003

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

☐ 1. NPDES PERMIT ☐ 2. SPCC PLAN ☐ 3. STATE PERMIT (specify): UKN
☐ 4. AIR PERMITS ☐ 5. LOCAL PERMIT ☐ 6. RCRA TRANSPORTER
☐ 7. RCRA STORER ☐ 8. RCRA TREATER ☐ 9. RCRA DISPOSER

☐ 10. OTHER (specify):

B. IN COMPLIANCE?

☐ 1. YES ☐ 2. NO ☒ 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number):

VIII. PAST REGULATORY ACTIONS

☐ A. NONE ☐ B. YES (summarize below)

UKN

IX. INSPECTION ACTIVITY (past or on-going)

☐ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below) UKN

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

X. REMEDIAL ACTIVITY (past or on-going)

☐ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below) UKN

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.

12-004

REFERENCE 13

Kenneth Burns, Oklahoma State Department of Health, "Tentative Disposition", October 6, 1980.

TENTATIVE DISPOSITION

6 OK0390

File this form in the regional Haz ... te Log File and submit a copy to: U. ...onmental Protection Agency; Site Trac... System; Hazardous Waste Enforc... ...k Force (EN-335); 401 M St., SW; Wash...gton, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
THOMASON LUMBER CO.	—	OKD007395524
C. CITY	**D. STATE**	**E. ZIP CODE**
BROKEN BOW	OK	74728

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by ... in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIV
A. NO ACTION NEEDED — NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*	X		X		
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION NEEDED *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION

INVESTIGATIVE ACTION NEEDED - FURTHER DEFINE PROBLEM.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*	G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE TH... ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*
—	—

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
KENNETH C. BURNS	(405) 271-5338	10/6/80

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

—

SUPERFUND FILE

JUN 10 1992

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo, day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION (1)				REORGANIZED
(2)				
(3)				
b. TYPE OF MONITORING (1)				
(2)				
c. TYPE OF SAMPLING (1)				
(2)				

EPA Form T2070-4 (10-77)

Continue On Reverse

Continued From Front

III. INVESTIGATIVE A... Y NEEDED and PART B - PROPOSED ... IGATIVE ACTIVITY (Continued)

d. TYPE OF LAB ANALYSIS				
(1)				
(2)				
e. OTHER (specify)				
(1)				
(2)				

C. ELABORATE ON ANY OF THE INFORMATION PROVIDED IN PART B (on front & above) AS NEEDED TO IDENTIFY ADDITIONAL INVESTIGATIVE WORK.

D. ESTIMATED MANHOURS BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES	1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES
a. EPA		b. STATE	
c. EPA CONTRACTOR		d. OTHER (specify)	

IV. REMEDIAL ACTIONS

A. SHORT TERM/EMERGENCY STRATEGY (On Site & Off-Site): List all emergency actions needed to bring site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the space below.

1. ACTION	2. EST. START DATE (mo,day,&yr)	3. EST. END DATE (mo,day,&yr)	4. ACTION AGENCY (EPA, State, Private Party)	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

B. LONG TERM STRATEGY (On Site & Off-Site): List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. EST. START DATE (mo,day,&yr)	3. EST. END DATE (mo,day,&yr)	4. ACTION AGENCY (EPA, State, Private Party)	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

C. ESTIMATED MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES	1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES
a. EPA			b. STATE		

REFERENCE 14

LETTER. Subject: Administrative Order Docket No. VI-81-062. From: Diana Dutton, Director of Enforcement Division, EPA, To: Art Thomason, President, Thomason Lumber Company, April 9, 1981.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

Apr 9, 81

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (8081704)

Mr. Art Thomason
President
Thomason Lumber Co.
P. O. Box 804
Broken Bow, Oklahoma 74728

Re: Administrative Order Docket No. VI-81-062

Dear Mr. Thomason:

Violation of a Federal NPDES permit requires the Environmental Protection Agency to take appropriate enforcement action to assure compliance. Pursuant to the Clean Water Act (33 U.S.C. 1251 et seq.), the enclosed Administrative Order is hereby served on you and Thomason Lumber Company for the violations described therein.

Compliance with the provisions of this order is expected within the maximum time periods established by each part of the order. Your cooperation and prompt attention will be appreciated. In response hereto, please reference Docket No. VI-81-062 and send correspondence to the attention of Ms. Gay Arney (6AEL).

Since it is the policy of the Environmental Protection Agency to achieve full compliance with the NPDES permit program as rapidly as possible, this office is prepared to help you in any way it can. If you have any questions, please contact Kenneth Holley, EPA, Dallas, Texas at (214) 767-4375.

Sincerely,

Thomason Lumber Co
OKD007335[illegible]

Diana Dutton
Director
Enforcement Division (6AE)

Enclosure

cc: Oklahoma Water Resources Board

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF	§	DOCKET NO. VI-81-062
	§	
THOMASON LUMBER COMPANY	§	
	§	
PROCEEDINGS UNDER SECTION 301(a) and 309(a)(3), CLEAN WATER ACT [33 USC 1311 and 33 USC 1319(a)(3)], in RE: UNLAWFUL DISCHARGE OF POLLUTANTS	§	ADMINISTRATIVE ORDER

4-19-81

The following FINDINGS are made and ORDER issued pursuant to the authority vested in the Administrator of the Environmental Protection Agency by the above referenced statute (hereinafter the Act) and delegated to the Regional Administrator, Region 6, and duly redelegated to the undersigned Director, Enforcement Division, Region 6.

I.

Thomason Lumber Company (hereinafter referred to as "Company") is a company doing business in the State of Oklahoma, and having a place of business in Broken Bow, Oklahoma, the mailing address for which is P. O. Box 804, Broken Bow, Oklahoma, 74728.

Thomason Lumber Co
OKD 007335524

II.

Pursuant to the authority of Section 402(a)(1) of the Act [33 USC 1342(a)(1)], the Regional Administrator, Region 6, issued National Pollutant Discharge Elimination System (NPDES) Permit No. OK0034207 to the Company on October 2, 1975, with an effective date of November 16, 1975. The permit was terminated on September 2, 1977.

III.

Section 301(a) of the Act prohibits the discharge of any pollutant into Waters of the United States except insofar as such discharge is regulated by a permit issued pursuant to Section 402 of the Act. The Company does not currently have a NPDES permit for the discharge of any pollutant.

IV.

Based upon information provided by the Environmental Protection Agency, the Company has violated Section 301(a) of the Act in that by contract inspections performed by Ecology and Environment, Incorporated, on December 4 and 15, 1980, the inspectors' reports indicate that: (1) spills from the separator tank and ponds are evident, (2) the pipeline from the separator tank to Pond A is broken, (3) final treatment Pond C contents are discharged via a pipe down the ground slope

14-002

to a nearby intermittent creek, (4) the soil around the ponds and processing plant is highly contaminated with pentachloraphenol and cresote, and (5) the ponds used to recover pentachlorophenol and cresote are not lined.

V.

Issuance of this Order does not preclude the pursuit of additional enforcement action for the violations cited herein.

ORDER

Based on the foregoing FINDINGS OF VIOLATION and pursuant to the authority vested in the Administrator under Section 309(a)(3) and 301(a) of the Act [33 USC 1319(a)(3) and 33 USC 1311] and duly delegated to the Regional Administrator, Region 6, and duly redelegated to the undersigned Director, Enforcement Division, Region 6, it is hereby ORDERED:

A. That the Company, upon receipt of this Order, shall immediately cease disposing of any pollutants including pentachlorophenol and cresote. The Company shall, within fourteen (14) days, submit a report to the Environmental Protection Agency confirming the cessation of this discharge.

B. Within thirty (30) days of receipt of this Order, the Company shall prepare and submit to the EPA a report for delineating the extent of the soil contaminated with pentachlorophenol and cresote and for removing and properly disposing of this contaminated soil.

C. In the event the Company wishes to discharge pollutants in the future, a permit application shall be submitted in accordance with the Consolidated Permit Regulations, 45 Federal Register 33290, dated May 19, 1980, or any applicable supersedant regulations.

The effective date of this Order shall be the date of receipt.

Dated: This _____ day of _____, 1981.

_____
Diana Dutton
Director
Enforcement Division (6AE)

14-003

REFERENCE 15

Larry D. Wright, "Tentative Disposition", January 28, 1981.

EPA

POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION: 6 | SITE NUMBER: OK 3701

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

OKD007335524

A. SITE NAME	B. STREET	
Thomason Lumber Co.	Hwy. 70	
C. CITY	**D. STATE**	**E. ZIP CODE**
Broken Bow	Oklahoma	74728

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED – NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*	X	X			
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION NEEDED *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION

Site appears to be sloppily operated with possible discharges of creosote/PCP to nearby creek. Soils are moderately permeable, although groundwater in area not used for drinking water supply. Samples were collected, and a final strategy will be determined based on the results of analysis.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*	G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*
March 31, 1981	

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Larry D. Wright	FTS 729-3274	1-28-81

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

Samples analyses of:
1. Material in pond prior to discharge.
2. Soil sample from drainage path between pond and creek.
3. Upstream and downstream creek sediment samples.

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo, day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION (1)				SUPERFUND FILE
(2)				JUN 10 1992
(3)				GEORGIA
b. TYPE OF MONITORING (1)				
(2)				15-001
c. TYPE OF SAMPLING (1)				

REFERENCE 16

Amy Layne, EPA, "Tentative Disposition", November 29, 1985.

EPA

POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION	SITE NUMBER
6	OKO3701

File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

OKD007335524

A. SITE NAME	B. STREET
THOMASON LUMBER COMPANY	ON HUFFMAN ROAD – 0.5 mi. SOUTH OF Hwy 70

C. CITY	D. STATE	E. ZIP CODE
BROKEN BOW (McCURTAIN COUNTY)	OK	74728

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED – NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*			X		
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION NEEDED *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION

Thomason Lumber Company apparently entered into a consent agreement in March of 1985, with OWRB for site cleanup and closure. The site is also under investigation by OSDH/RCRA as a possible non-notifier. If OSDH/RCRA and OWRB efforts fail to result in effective remedial actions, OSDH should renew investigation under the PA/SI program. A followup inspection will be necessary to insure that appropriate cleanup has been achieved.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*

G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Amy M. Layne, 6H-ES	(214) 767-6421	11/29/85

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

A final strategy recommending no further action can be achieved if followup inspection reveals that appropriate cleanup and closure has been achieved.

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo.,day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION (1) (Recon) SIF	FY86	(OSDH) STATE * **		SUPERFUND FILE REORGANIZED
(2)				
(3) * If OSDH/RCRA and OWRB efforts fail to bring about remedial cleanup of the site, OSDH can pursue investigation under the PA/SI Program.				
b. TYPE OF MONITORING (1)				
(2) ** Or FIT, if State actions are not Possible.				
c. TYPE OF SAMPLING (1)				16-001
(2)				

EPA Form T2070-4 (10-79)

Continue On Reverse

REFERENCE 17

RECORD OF COMMUNICATION: Subject: Fish Production. From: Ariadne Lytwyn, Geologist, Fluor Daniel, Inc., To: Jack Harper, Ok Dept. Wildlife, March 25, 1994.

FLUOR DANIEL

RECORD OF TELEPHONE CONVERSATION

FROM:	Ariadne Lytwyn	DATE:	March 25, 1994
LOCATION:	FD - Chicago	TIME:	9:18 pm
TO:	Jack Harper	P.O. NO.	
LOCATION:	Ok Dept. of Wildlife	OTHER REF:	

Oklahoma does not keep records for amount of fish caught a year. However, fishing does occurred in the Little River. The types of fish caught for human consumption are large-mouth bass, channel catfish and bluegill fishes.

17-001

REFERENCE 18

U.S. Environmental Protection Agency, "Hazard Ranking System Guidance Manual", OSWER Directive 9345.1-07, November 1992, p. 314.

EPA540-R-92-026
OSWER Directive 9345.1-07
November 1992

The Hazard Ranking System Guidance Manual

Interim Final

Hazardous Site Evaluation Division
Office of Solid Waste and Emergency Response
U.S. Environmental Protection Agency
Washington, DC 20460

ESTIMATING PRODUCTION USING SURROGATE DATA

If estimates of annual production data specific to the fishery are not available, estimate production by collecting information for similar surface water bodies containing comparable fisheries. Determine if the surrogate fishery (and the water body itself) is similar to the fishery being evaluated in terms of

- Fish species or other human food chain organisms present (e.g., production data for a fishery consisting primarily of pike should not be used when evaluating a fishery consisting primarily of smallmouth bass);
- Flow rate (or depth for oceans);
- Characteristics (e.g., salinity, flow, depth, subsurface bottom, state classification, overall water quality);
- Distance from each water body to possible surrogate water body; and
- Fishing activities.

Consider these criteria before assuming that production data from a similar water body can be used for estimating production for the fishery (or portions of the fishery) within the TDL. State fish and game officials are a likely source for such information. Document the rationale for using surrogate data from another fishery for the fishery being evaluated.

For example, production data for a fishery consisting primarily of trout could be used for a fishery consisting of trout that is 30 miles away. The average annual flows of both water bodies should be similar even though the surface water dilution weight assigned to each water body may be different (e.g., a small to moderate stream may have a flow of 90 cfs (an assigned dilution weight of 0.1) while an acceptable surrogate fishery may be a moderate to large stream having a flow of 140 cfs (an assigned dilution weight of 0.01)). In addition, the characteristics of both the surrogate water body and the water body within the TDL should share similar attributes. Both should be either managed as a high quality cold-water fishery or be managed as a limited warm-water fishery. Likewise, both should be either annually stocked and aggressively managed for sport fishing or not stocked.

ESTIMATING PRODUCTION WITHOUT ACTUAL OR SURROGATE DATA

If surface water is documented to be a fishery and production data (actual and surrogate) are not available, assign the fishery a minimum human food chain production of greater than 0 pounds per year. Then, assign the fishery a human food chain population value of 0.03 based on HRS Table 4-18. Use this human food chain population value to assign factor values for Level I concentrations, Level II concentrations, and potential human food chain contamination. Show that the fishery supports human food chain organisms by documenting that at least one human food chain organism lives within fishery boundaries and that fishing occurs in the surface water body.

18-002